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REPORT

OF THE

DIRECTOR OF PHYSICAL TRAINING.

DECEMBER, 1891.



BOSTON:

ROCKWELL AND CHURCHILL, CITY PRINTERS.

1891.

IN SCHOOL COMMITTEE,
BOSTON, Dec. 8, 1891.

Ordered, That the Director of Physical Training be authorized to report to the Board in print, and that one thousand copies of the report be printed.

Attest:

PHINEAS BATES,
Secretary.

REPORT.

To the School Committee:

I beg to submit the following report :

In accordance with the terms of my election to the office of Director of Physical Training, I reëntered the service of the city of Boston on January 1, 1891, after an interval of thirteen and one-half years. I at once began visiting schools of all grades, from the Kindergarten to the High school, having a twofold purpose in view. In the first place, I was desirous to familiarize myself with the main features of the organization and administration of the schools; and secondly, I wished to obtain an idea of the character and extent of the physical training which had been introduced into the schools, in accordance with the vote of the School Committee, on June 24, 1890, which reads as follows :

" *Ordered*, That the Ling or Swedish system of educational gymnastics be introduced into all the public schools of this city."

Toward the end of February I addressed a circular letter to the principals of schools : in response to which I received a statistical return, covering the month of January, 1891, regarding all High, Grammar, and Primary schools.

The return showed that upwards of 1,100 teachers were giving gymnastic instruction, for some 17 minutes daily, to their classes. In some schools the old memorized gymnastic drill had been continued, pending the appointment of a Director of Physical Training; but the greater number of teachers, in the Grammar and Primary schools, were

engaged in an honest attempt to teach the Ling free standing movements. Counting the masters of the 55 Grammar schools, 1,120 teachers, in the Grammar districts, were returned as teaching gymnastics, of which number, below the grade of master, 844 were teaching Ling gymnastics, and 221 teaching what may be termed not inaptly "mixed gymnastics." The best results were observed in those schools whose masters had attended the Teachers' Classes of the Boston Normal School of Gymnastics, and had taken particular pains, besides, to lead, assist, and criticise their teachers in the work of class instruction in gymnastics. In certain schools extremely creditable results had been attained, especially in those where the teachers had formed themselves into classes and hired special instructors in the Ling system to give them normal lessons.

It gives me pleasure to say that I have been much surprised and gratified by the interest, zeal, and intelligence shown by the teachers of the Grammar and Primary schools, as a body, in the subject of physical training.

Since April 1, 1891, I have availed myself of the invaluable services of Mr. Hartvig Nissen, who was elected Assistant Instructor in Physical Training, March 10, 1891. Mr. Nissen has assisted me in visiting and inspecting schools, and has conducted normal classes in the Ling gymnastics for the teachers of the Grammar and Primary schools. Two inspections of the Grammar schools have been made since they opened on September 9. On the basis afforded by the first inspection: 8 were rated "excellent"; 18 "good"; 17 "passable"; and 12 "poor." The result of the second inspection is as follows: 8 were marked "excellent"; 20 "good"; 20 "passable"; and 7 "poor."

I propose to continue such classes until the classwork in the schools shall show that the average teacher has grasped the main principles of the Ling school gymnastics and is able to carry them into effect.

Early in 1890 I was engaged by Mrs. Mary Hemenway to deliver a course of lectures on Physical Training before the students of the Boston Normal School of Gymnastics. These lectures were given in the Old South Meeting-House, at noon, on six Saturdays, viz., March 21 and 28, April 18 and 25, and May 2 and 9. Through the kindness of Mrs. Hemenway the lectures in question were thrown open to all teachers of the Boston Public Schools. I was thus enabled to meet so many of the teachers as cared to consider the salient facts regarding the origin, development, and characteristic features of the principal types and systems of physical training.

I also addressed the masters of the Grammar schools upon "Physical Training in the Boston Schools" at the May meeting of the Masters' Association.

In accordance with an order of the School Committee, which was passed May 12, Mr. Nissen gave special normal instruction to the teachers of the Primary and Grammar schools of some forty districts during May and June. This form of instruction has been continued, though in a less formal way, in all Grammar districts, from the opening of the schools in September last until now. In accordance with an order passed by the School Committee on December 8, arrangements have been made to provide for the normal instruction, twice a month, in the Ling free standing movements, of all teachers of the Primary and Grammar schools not especially excused by the Committee on Physical Training, during the remainder of the present school year.

The question of providing facilities for exercises, involving the use of Swedish gymnastic apparatus, in several school-houses now building, has been brought forward and has occupied a good deal of my attention. It is perfectly feasible, and on many accounts highly desirable, to prepare for the introduction of apparatus gymnastics into all school-houses now building, or which shall be built in the future.

The apparatus can be made and set up at comparatively slight expense in any new school-house; and in many of the buildings now in use, I may add. I am prepared to furnish the plans in accordance with which the necessary Swedish apparatus should be constructed and put in place; and I shall soon be able to make accurate estimates as to the expense which would be involved. I am in favor of recognizing probable contingencies, and preparing for them. I doubt not that the time will come when the introduction of Swedish apparatus gymnastics, into the Grammar and High schools, will be considered indispensable; but that time is not yet. It is of paramount importance that the great body of our class-teachers should become proficient in free gymnastics, first of all. It remains to be seen whether the present staff of this department is sufficient to secure that single end. The problem of introducing apparatus gymnastics, and of otherwise improving the course of physical training in the High schools, is easier of solution, in some respects, owing to their organization on the basis of departmental instruction. A few pieces of Swedish apparatus placed in the hall of the Brighton High School, more than a year ago, are now used, under the guidance of a competent special instructor, in the instruction of girls. The gymnasium belonging to the English High and Latin schools contains ample room for a set of Swedish apparatus, in addition to its present supply of gymnastic machines. This gymnasium is of very little substantial use at present; though, if the change suggested were made and a competent teacher of gymnastics were provided, it might readily be made attractive and serviceable, out of school hours, to the boys of the English High and Latin schools. During school hours it might be used to very considerable advantage in the gymnastic instruction of those boys, of the Latin School, who are debarred from military drill on account of their tender years.

In accordance with the vote of the School Committee, on October 13, authorizing an expenditure, not to exceed \$600, in fitting up a vacant room in the Charlestown High School for gymnastic purposes; I have ordered a model set of Swedish apparatus for that school. The apparatus, which was made to order in Christiana, Norway, is now upon the ocean, and will, it is hoped, be ready for use early in 1892. It is intended that this apparatus shall serve as a model for purposes of construction, and as a guide in determining the proper cost of similar machines, in case the need of procuring Swedish apparatus for other schools shall arise.

Thanks to the liberality and public spirit of Mrs. Mary Hemenway, Dr. Claes J. Euebuske, of the Boston Normal School of Gymnastics, gave forty-six lectures on the theory of Swedish school gymnastics, to the pupils of the Normal School during the school year ending in June, 1891. Under the direction of Mr. Boyden, the sub-master, twelve minutes daily, in each class, were devoted to practice-lessons in gymnastics. By a vote of the School Committee, passed September 16, 1891, Miss Laura S. Plummer, formerly a third assistant in the Emerson School of this city, and a graduate of the Boston Normal School of Gymnastics, was promoted to the position of second assistant in the Normal School, where the instruction in physical training has been put in her charge. The appointment of a competent teacher for the especial purpose of instructing the pupils of the Normal School in the principles and practice of educational gymnastics seems to me a step of the highest consequence. I cannot commend this experiment too warmly, as I believe that the permanent success of the present attempt to make physical training a coördinate and integral factor in the education of our school children will be largely conditioned on the success of this new departure in normal training.

The Cook County Normal School, in Illinois, the State Normal School at West Chester, Pennsylvania, and possibly

some other schools of equal rank, have advanced physical training to the dignity of a coördinate branch of instruction within a few years; but Boston is the only American city, so far as I know, that has even attempted such a course of action. Having been invited by the principal of the Normal School to coöperate in shaping and developing this new department of instruction, I shall do all I can to further its success.

Besides continuing the work of normal instruction and of visiting the schools; I propose, during the ensuing year, to elaborate a uniform, minimal course of gymnastic work, according to the Swedish system, for the Primary and Grammar schools; to perfect and institute, if possible, an efficient system of inspecting and rating the class instruction in gymnastics; and to take such other measures to extend and confirm the system of physical training which has been ordained by your Board to be introduced into all the Public Schools of this city, so far as the means placed at my disposal will permit.

It is doubtful if anything short of a general revival of religious asceticism could relegate physical training to the mean and insignificant place assigned to it in American education before the spirit of educational innovation and reform gained sway in the early part of this century. Decade by decade, and at times, year by year, — especially during the last thirty years, — as problems due to the growth of cities have pushed their way to the front, the question of promoting and conserving the bodily health of pupils, in school and college, has assumed larger and more portentous proportions. The intrinsic importance of physical education is sufficiently obvious, and has long been recognized, both implicitly and explicitly, in this as in other communities. Again and again, enthusiastic attempts have been made to combine and correlate bodily training with mental and moral teaching. But so far, no important city or town in

the United States has succeeded in maintaining, for ten consecutive years, a genuine and adequate system of physical education. Of private and endowed institutions, belonging either to the school or college grade, only a very small number have achieved real success in this field. The reasons for this ill-success are not far to seek, and may be traced, speaking broadly, to the readiness of the public, and educators, as well, to espouse heterogeneous and superficial views of physical education, and to adopt hap-hazard and make-shift schemes of procedure, in ignorance or disregard of the plain teachings of science and experience.

At no time, within the memory of men now living, has the interest in problems pertaining to the physical side of education been so general, active, and intelligent as it is to-day. Manifestations of this interest are evident on every hand, not only in Boston and its vicinity, but throughout the country and the civilized world, as well. Ample warrant for this statement is to be found in the number and character of the conferences and discussions which have been held recently, in the reports of governmental commissions, in ministerial ordinances, in the action of municipal boards, and in the schemes and experiments instituted by philanthropists, scientists, and educationists. It should be borne in mind, however, that exhortation, discussion, and experiment in this field are just as little novelties in Boston and New York, as in Berlin and Paris, or London and Stockholm.

It may help us to understand the present movement for the advancement of physical education, to estimate its force and direction, and to forecast its probable results, if we review the history of the principal movements of a like nature which have had their day in this country, and particularly in our own city.

In the last quarter of the last century schemes and ex-

periments for the reform of popular education were rife in Europe, especially in Germany, where the Philanthropists, who were the precursors of Pestalozzi, Fellenberg, and Frœbel, strove to combine physical with intellectual and moral education. The beginnings of popular education in England, due to Raikes, the inventor of the Sunday-school, and to Bell and Lancaster, the apostles of Infant schools and Monitorial system of instruction, also date from this period. The educational movement in Europe made but slight impression upon American thought and endeavor, until after the close of the War of 1812. But the United States shared markedly in the exalted and restless mental activity which characterized the period of twenty or thirty years following the battle of Waterloo. This period was extremely prolific in varied schemes for the amelioration of popular ignorance and misery; and American reformers, especially in New England, became highly susceptible to the influence of foreign example, and developed a well-marked aptitude for "observation and imitation." Physical Education, Manual Training, and what is now termed "University Extension," were all favorite themes, not only with dreamers and theorists, but also with "practical educators" and hard-headed legislators and men of affairs.

Naturally enough, the first comprehensive schemes proposed for the physical education of American youth were of a military character. One of the first emanated from a Massachusetts man, Gen. Henry Knox, who had served in the War of the Revolution. In January, 1790, President Washington transmitted to the first Senate of the United States a report from General Knox, then Secretary of War, recommending the enrolment and military training of all men between the ages of eighteen and sixty. This plan, which failed of adoption, called for the formation of "annual camps of discipline" in each State. In these camps "the advanced corps," composed of "the youth of eighteen,

nineteen, and twenty years of age," was to receive its schooling in the art of war. It was provided that "no amusements should be admitted in camp but those which correspond with war, the swimming of men and horses, running, wrestling, and such other exercises as should render the body flexible and vigorous."

In 1817, in response to a suggestion of President Madison, a report was made to the House of Representatives, on the reorganization of the militia, in which it was recommended "that a corps of military instructors should be formed to attend to the *gymnastic and elementary part of instruction in every school in the United States*, whilst the more scientific part of the art of war should be communicated by professors of tactics, to be established in all the higher seminaries." This scheme did not receive the sanction of law, either in 1817, or in 1819, when it was again brought forward. The credit for the first considerable successes in combining physical with mental training, in America, should be awarded to the United States Military Academy, at West Point, and to certain schools modelled after it that were nearly coeval with it. Physical training at West Point has a continuous history of nearly, if not quite, seventy-five years; since the administration of Major Sylvanus Thayer, as superintendent, to whose shaping influences the West Point course of instruction owes its most peculiar characteristics, began in 1817. Major Thayer, who had studied the organization and administration of the most prominent military schools of the Continent, seems to have modelled West Point largely after those of France.

In 1818, Capt. Alden Partridge, Major Thayer's immediate predecessor at West Point, resigned from the United States Army, apparently for the purpose of attempting to reform the superior education of the country, whose defects, including an utter neglect of physical education, he vigorously criticised in his well-known "Lecture on Education." In

1820, Capt. Partridge opened his "American Library, Scientific, and Military Academy," at Norwich, Vt. In a card published in April, 1825, on the eve of his departure for Middletown, in Connecticut, where he reopened his seminary, Capt. Partridge set forth the results of his labors at Norwich. He claimed that his plan of "connecting mental improvement with a regular course of bodily exercises and the full development of the physical powers, the whole conducted under a military system of discipline," had succeeded beyond his most sanguine expectations. Capt. Partridge was directly concerned in the establishment, or rehabilitation, of no less than six military academies, two of which were opened in 1853, the year of his death. But the public had had enough of warfare and war-like parade, and evinced a marked preference for the utilitarian and humanitarian styles of bodily training, as compared with that of the military sort.

In the years 1825 and 1826, physical education became a matter of almost epidemic interest in New England. Boston in particular was affected by this interest. The outbreak was measurably due to contagion imported from abroad, — by exiles seeking asylum and employment; by scholars returning from foreign universities; by teachers fresh from pilgrimages to the wonder-working shrines of the new educational cult, in Great Britain and on the Continent. Glowing accounts were multiplied, by voice and pen, of the European revival of physical education, which had been brought about by the labors of Guts Muths, Jahn and the Turners, in Germany; of Pestalozzi and Fellenberg, in Switzerland; of Amoros, in France; and of Clias and Völker, in England. But of Nachtgall's work in Denmark, or of Ling's, in Sweden, little or nothing was said. Local influences, *e.g.*, "the lecture habit," also contributed to intensify the infectitious enthusiasm which these accounts produced.

J. G. Coffin, M.D., of Boston, gave public lectures on Physical Education in the spring of 1825. Dr. Coffin, who had served on the School Committee, evidently had the interests of this subject much at heart, for we find him calling attention to "the great purposes of Physical Education" in his "Discourse on Cold and Warm Bathing," published in 1818, the year in which Joseph Lancaster, the English Quaker, visited Boston in the interest of monitorial instruction. Dr. Coffin recurred at length to the subject in his revised and amended edition of "Buchan's Domestic Medicine" (Boston, 1825), as well as in the lectures already alluded to. In 1826 Dr. Coffin became proprietor and editor of "The Boston Medical Intelligencer, devoted to the Cause of Physical Education and to the Means of Preventing and Curing Disease." In 1823 the Boston Monitorial School was established in Washington court, for girls. Mr. William B. Fowle was its instructor. In a letter to the editor of the "Medical Intelligencer" dated October, 1826, Mr. Fowle gives an account of his "humble efforts" to introduce gymnastics into the Monitorial School. "My attempt takes date," he says, "from the delivery of one of your lectures on Physical Education, early in the spring of 1825. I had long before noticed the feeble health of many of my pupils, and encouraged them to take more exercise, but they wanted means and example, and little or nothing was effected. The very day after the delivery of your first lecture, I procured two or three bars, and as many pulleys, and after I had explained the manner of using them to the best advantage, my pupils needed no further encouragement to action. My chief difficulty was in the selection of proper exercises for *females*. You know the prevailing notions of female delicacy and propriety are at variance with every attempt to render females less feeble and delicate. . . . I have finally succeeded in contriving apparatus and exercises, enough to keep all employed in play hours. Besides the ordinary exercises of

raising the arms and feet and extending them in various directions, we have various methods of hanging and swinging by the arms, tilting, raising weights, jumping forward marching, running, *enduring, etc., etc.* I have no longer any anxiety about procuring suitable exercises, or in sufficient variety, for my pupils; and I believe the few parents whose more prim education led them to shudder at my innovation have surrendered their prejudices. . . . I hope the day is not far distant when gymnasiums for women will be as common as churches in Boston, and when our young men, in selecting the mothers for their future offspring, will make it one of the conditions of the covenant that they be healthy, strong, capable of enduring fatigue, encountering danger, and helping themselves." In commenting on Mr. Fowle's letter, Dr. Coffin remarks: "We value this letter mainly, in the first place, because it is the first account we have seen of gymnastics having been successfully practised in any school for girls in any part of the United States; and secondly, because it is the first direct evidence we have had that the feeble, though persevering, efforts we have from time to time made to bring into notice and favor the long missing though fundamental branch of education, have produced any good effect."

It is noteworthy that Dr. Coffin makes no mention of the fact that, at the time of his writing, gymnastic instruction formed a part of the curriculum in Mr. Gideon F. Thayer's private school for boys on Harvard place. Possibly, Mr. Thayer's adoption of gymnastics was a self-prompted action. The exact date of Mr. Thayer's adoption of gymnastics is uncertain. It must have been prior to June 15, 1826, as is shown by a letter written on that date to the editor of the "American Journal of Education," by Mr. Thayer, for the purpose of describing the peculiarities of his school in Harvard place, out of which the well-known Chauncy Hall School developed later. The following is taken from Mr.

Thayer's letter: "One teacher takes a division of a class at one end of the hall, and another one at the other end; while the remaining boys form a line in the aisle, and taking such apparatus as may be designated, move out of school in company for gymnastic exercises. When the weather is suitable they go, accompanied by the principal, to the Common, where they engage for about fifteen minutes in running, hopping, jumping, — with poles and without, — leap-frog, drawing, or pulling by classes at the opposite ends of a rope, etc., and returning to the school, one of the teachers takes out such of the remaining boys as have been found correct in their lessons, for similar physical exercises in the open air. When the weather is not suitable for this, the boys go into the yard about the school, a class at a time, and take exercise by themselves as well as the space will allow. We have a plank placed edgewise, and raised about eighteen inches from the ground, on which we require them to walk, to strengthen their legs and ankles and gain the power of preserving equilibrium in narrow paths, etc. These sports are much enjoyed by the boys, and are granted to none who have been found deficient in lessons or deportment during the morning. They are to be extended by the erection of such additional apparatus as the limits about the establishment will permit. Besides our daily exercises, the principal, sometimes accompanied by an assistant, occasionally invites boys to meet him early in the morning on the Common or on the mall, where they engage in their usual sports, or walking. We have been several times to South Boston during the present season. We sometimes exercise them, too, in school hours, in marching with reference to the carriage of the body, turning out the toes, and such other matters in connection as boys are most apt to fail in."

There is good reason to believe that the physical education installed at West Point in 1817, and at the Norwich Seminary in 1820, was of the narrow and technical military type, and consisted chiefly of infantry drill and marching.

It is a significant fact that the Board of Visitors on the Military Academy at West Point, of which Mr. George Ticknor, of Boston, was secretary, state in their report, dated June 24, 1826, that they "are persuaded that a *Riding-School* and *Gymnastic exercises* are much wanted here; and they recommend that a building be erected fitted for these purposes, for a *Fencing-School* and for *Military Drills*." One reason given for this recommendation is, that "the drill during the summer months is sufficient to give the cadets healthful exercise, and no more; but during the winter this resource fails, and their spirits and activity fail with it." It is evident, too, that the crude though sanguine experiments of Messrs. Fowle and Thayer did not lead to very considerable or lasting results, inasmuch as the former was induced, by the inexpugnable prejudices of his patrons, to substitute dancing for gymnastics, and the latter did not find it worth his while to provide a gymnasium for the boys of the Chauncy Hall School.

The most influential and deservedly famous of the school gymnasia of this period was that established in 1825, by Messrs. J. G. Cogswell and George Bancroft, formerly members of the faculty of Harvard College, then the proprietors of the Round Hill School, at Northampton, Mass. It was in reality a *Turn-platz*, or gymnastic-ground, planned, fitted, and managed in accordance with the principles and practice of the gymnastic system then, as now, known as German turning. Contemporary notices make it clear that this gymnasium was opened as early as the spring of 1825, in which year the name of "Charles Beck, Instructor in Latin and Gymnastics" appears at the head of the list of assistants at Round Hill. The whole school, then comprising one hundred and twelve boys, was divided into gymnastic classes, and each class received instruction from Dr. Beck, an hour at a time, three times a week. Dr. Beck had received his gymnastic training under Jahn in Germany. The venerable Dr. George C. Shattuck, of this city, who was a pupil at

Round Hill, informs me that, "at the same time, there were a dozen riding-horses, and classes for riding three times a week. Gardens were assigned the boys in which they raised plants and vegetables. A piece of land was set apart for building huts. Base-ball, hockey, and foot-ball were the games." The Round Hill School introduced many features that were novelties in the liberal education of American boys. Several of its novel features, however, were simply direct imitations of procedures that one or the other of its projectors had met with in visiting European schools, as, for instance, those of Fellenberg, at Hofwyl, and of Pestalozzi, at Yverdun. But I know of no reason to dispute the claim put forth, in 1820, by Messrs. Cogswell and Bancroft, that they "were the first in the new continent to connect gymnastics with a purely literary establishment." Physical training continued to be a marked feature of the Round Hill School for several years.

It would appear that the first public gymnasium of any note, in the United States, was the Boston Gymnasium. The "Medical Intelligencer," for Oct. 3, 1826, has the following: "The Boston Gymnasium was opened on Thursday last [i.e., September 28], at six o'clock in the morning, for exercise and instruction. The principal instructor is Charles Follen, LL.D., a pupil of the celebrated Jahn. The assistant instructor is George F. Turner, A.B., of Virginia, recently a distinguished pupil in the gymnasium at Cambridge." The fullest connected account that I have seen of the movement to establish the Boston Gymnasium is that given by Mr. Granville B. Putnam, master of the Franklin School of this city, in the "New England Magazine" for September, 1890. From that article, and from various other sources of information, I have compiled what follows: On March 13, 1826, a petition of William Sullivan, and others, asking for the "use of a piece of land not exceeding one acre in extent, at the junction of Boylston, Pleasant,

and Charles streets, for two years from the first day of May next, for the purpose of establishing a school for gymnastic instruction and exercise," was favorably received by the Board of Aldermen of Boston. On April 17, the Aldermen, and the Common Council in concurrence, granted the petition on the ground that the contemplated institution was to be "of a public nature and for the use of all citizens." "Gentlemen of the first respectability" were enlisted in the cause, as is evidenced by the fact that Daniel Webster wrote a letter favoring the scheme, and by the names of the committee charged to solicit contributions and apply them to the establishment of a "gymnastic school." The committee consisted of John C. Warren, George Ticknor, John G. Coffin, John S. Foster, Thomas Motley, Josiah Quincy, and John B. Davis. The public meeting, which resulted in the appointment of this committee, was held at the Exchange Coffee House, June 15, 1826. A full report of the meeting, signed by its secretary, Charles P. Curtis, appears in the "Boston Daily Advertiser" of June 19. The "Advertiser," of July 24, notes that only thirty shares at \$20 of the 250 offered by the committee had thus far been taken. The difficulty of securing the amount of money desired may serve to account for the fact that the Boston Gymnasium was opened out of doors, after the German fashion, in the Washington Gardens, on the northern corner of Tremont and West street, instead of on the land whose use had been granted by the city government. The gymnasium opened with a distinguished list of about two hundred pupils. The patrons increased to four hundred in number within the first year, and dwindled to four in the course of the second year, it is said. Both Dr. Follen, and Dr. Lieber, who succeeded him in July, 1827, were trained gymnasts, in the school of Jahn, and had left Germany for political reasons. Dr. Lieber came to America, from London, for the express purpose of taking charge of the Boston Gymnasium, and of

establishing a swimming-school. He was warmly recommended by Jahn himself, who declined the overtures made to him to assume direction of the Boston Gymnasium. "But," as has been said by another, "no talent could keep the gymnasium alive after the novelty had ceased, and some of the gymnasts had been caricatured in the print-shops."

The colleges and secondary private schools, of New England, were actively stimulated by the example of Round Hill and the Boston Gymnasium, and a furore for gymnastics was the result. The following extract, from the same issue of the "Medical Intelligencer" which is cited above, may serve to show how optimistic were the views current at this time, both in England and in the then scarcely weaned daughter country :

"A gentleman writes from London that gymnastics are now overspreading the whole country, for women as well as men, and little children, as well as for both. I should remark here that vaulting the wooden horse and exercising on the triangle are getting to be special favorites among the active and graceful exercises of the system. Incredible things are done every day on both, by men who were much too stately and dyspeptic a few months ago to lift their feet with a jump. They are cured now,—cured of dyspepsia, and cured of a worse fault, their absurd carriage. They sleep well, eat well, and look well, and, what is more, they behave well, since they are made happy by bodily exercise."

Harvard College started the first American college gymnasium in one of its dining-halls, in March, 1826, and later in the same season a variety of gymnastic appliances were put up in the college playground, known as the Delta. Dr. Follen, then engaged in teaching German in the college, was the instructor and leader in gymnastics. Indeed, it was largely owing to Dr. Follen's exertions, backed by an appeal from the medical professors, that the establishment of

the gymnasium was due. The students' interest in gymnastic exercises was fervid for one or two years, and then flickered out.

In September of the same year the corporation of Yale College voted to appropriate \$300 for the "clearing and preparing of the grounds (on the college green) for a gymnasium, and for the erection of apparatus for gymnastic exercises."

In May, 1827, Williams College appropriated \$100 to the procuring and erection of apparatus necessary "to the practise of the gymnastic exercises," — on the recommendation, as it would appear, of "Tutor Mark Hopkins," who had been sent on a mission to Round Hill to investigate the construction and working of its gymnasium.

A gymnasium was opened June 11, 1827, at Brown University, and we read that "the exercises were countenanced, and consequently enlivened, by the presence of the president, professors, and tutors of the university."

The "Gymnasium in the Grove" at Amherst College, vestiges of which existed so late as 1857, was probably erected in 1827 or 1828.

Physical exercises formed a feature, too, of the New York High School, which was established, for boys, in New York City in 1825 by Dr. John Griscom, whose studies of European schools and philanthropy had been embodied in two stout volumes entitled "A Year in Europe." It became one of the most famous and flourishing monitorial schools in the country. Lancasterian, Fellenbergian, and Pestalozzian principles and methods were boldly combined in its make-up and management. For some years the Round Hill School and the New York High School constituted a sort of *stella-duplex* in the educational firmament, and served to fix the gaze and fire the emulation of a host of aspiring and enterprising pedagogical adventurers. The annals of the time we are considering are too meagre to furnish a full and accurate

statement of the schools that were established to carry out the ideas suggested by the two institutions mentioned above. The schools named in the following list were established in the period 1825-8. Many of them avowedly strove to follow the example of Round Hill or the New York High School; some accepted both as models; and all of them affected to pay special attention to gymnastics and to "physical education." The list, though very incomplete, may suffice as an indication of the activity which then prevailed in erecting gymnasia and professing proficiency in conducting physical education. It includes: the Mt. Pleasant Classical Institution, Amherst, Mass.; Brookline (Mass.) Gymnasium; New Haven Gymnasium, Conn.; Berkshire High School, Pittsfield, Mass.; Bridgeport High School, Conn.; High School for Girls, Buffalo, N.Y.; Walnut Grove School, Troy, N.Y.; Livingston County High School, Geneseo, N.Y.; Classical and Scientific Seminary, Ballston, N.Y.; Mt. Hope Literary and Scientific Institution, Baltimore, Md.; and the Primary School, No. 1, Cheshire, Conn. It does not appear that physical training, in any of the schools just named, amounted to anything more than an ephemeral novelty — a faint and superficial imitation of the German or Swiss gymnastics, or of the English version of the same.

A striking instance of the vague and encyclopaedic meaning attributed to the term "physical education" is found in the "Outline of Instruction as conducted in the Cheshire (Conn.) Primary School No. 1, winter term, 1826-7," by A. B. Alcott, who migrated to Boston a year or so later and became for a time superintendent of the Infant School in Salem street, Boston. This gentleman was well known later as A. Bronson Alcott. The "Outline," which covers seven and one-half printed pages, octavo, embraces a great variety of topics which are grouped under the heads of "moral, physical, and intellectual education and instruments of education."

The topics under "Physical Education" occupy nearly a page, and relate to exercises for the eye, ear, hand, and voice; to play-games and to exercises. "Play-games" include, balancing, jumping, hopping, swinging, running. "Exercises" include: "exercises in the interior of the school-room, in which all engage simultaneously.

Exercises in Evening Reading Schools.

Amusements at the instructor's room.

Practical ethics, furnishing exercise for the physical powers daily among companions, etc."

Of the "Outline," Mr. Alcott says, "Its scope, it will be perceived, is limited and its arrangement crude; perhaps in some instances fanciful and arbitrary." Mr. Alcott's characterization of his "Outline" might also be applied to the following caption of an article which appears in the "Boston Medical Intelligencer" for March 27, 1827: "Physical education. — *Manner in which a new-born infant should be washed and dressed.* — *Wooden bathing-vessel.* — *Cushion stuffed with chopped straw.* — *No pins in the clothes.* — *First shifts.*"

The time was evidently not ripe for a genuine and sustained effort for the advancement of physical education in New England. What might have been the result if Drs. Beck, Follen, and Lieber had continued their crusade, instead of quitting the field, it is vain to surmise. Even they were governed more by theoretical and aesthetical notions of human perfectibility than by scientific knowledge of the laws of bodily health and development. How short-lived was the interest evoked by Jahn's pupils in gymnastics, for educational purposes, may be seen from the following extract from an address "On the Importance of Physical Education," delivered in Boston in 1830, by Dr. John Collins Warren (formerly President of the Boston Gymnasium) before the American Institute of Instruction at its first meeting. "The establishment of gymnasia throughout the country

promised, at one period, the opening of a new era in physical education. The exercises were pursued with ardor, so long as their novelty lasted; but owing to not understanding their importance, on some defect in the institutions which adopted them, they have gradually been neglected and forgotten, at least in our vicinity. The benefits which resulted from these institutions, within my personal knowledge and experience, far transcended the most sanguine expectations. . . . The diversions of the gymnasium should constitute a regular part of the duties of all our colleges and seminaries of learning."

One searches in vain for any evidence that the School Committee, or the Masters of the Public Schools of Boston, took any interest or part in the gymnastic movement of 1825-8. Mr. Thomas Cushing, formerly Principal of the Chauncy Hall School, in reply to my inquiries, obligingly writes me that at about the same time that Mr. Thayer "put up some gymnastic apparatus on a vacant strip of land opening on School street, and connected with the yard of his school in Harvard place, similar apparatus was erected in the yard of the old Latin School in School street, where I also exercised. I cannot say whether it was the teachers or the city who put up the simple apparatus. The boys used it pretty much as they chose, and I do not think it lasted more than a couple of years. No teacher gave direct instruction, but I remember seeing Mr. Samuel Parker, an usher and sub-master from 1824 to 1828, take off his coat sometimes and show us how to do things on the bars, etc." Mr. Cushing's statement with regard to the Latin School gymnasium is corroborated by Rev. Edward Everett Hale, who has kindly written me as follows: "When I went to the Latin School in School street, in 1831, there was a school-yard in which the boys of the lower story could play. In this yard was still left a wooden horse for jumping over, which was a relic of the gymnasium which had been made

there ; the boys had destroyed all the rest, as the Cambridge boys had destroyed everything in the Delta before I went there, excepting the holes in which the tan had been placed."

It would appear that the Common Council gave more thought to the physique of the youth committed to their charge than did the then School Committee, if we may judge from a passage contained in a report made in February, 1829, by a committee of the Common Council on the Government and Discipline in the House of Reformation for Juvenile Offenders, at South Boston. The passage reads, "They (the boys) are allowed two and one-fourth hours each day for recreation, viz., three-quarters of an hour in the morning, at noon, and in the evening. These hours are mostly spent in gymnastic exercises, at ball, in walking, etc."

In the interval between 1830 and 1860 there was no general or widespread revival of interest in school or college gymnastics ; and athletic sports were not recognized, either as an elective or compulsory branch of education. But what was loosely termed "physical education" received marked attention from writers and talkers on education. A rather imposing list might be made of addresses, articles, and books, purporting to relate, in whole or in part, to physical education, that were published in the course of the thirty years under review. It would contain a few titles on calisthenics and gymnastics, but the burden of utterance would be found to relate to physiology, phrenology, and the "religious observance," to quote from Horace Mann, "of all those sanitary regulations with which modern science has blessed the world."

Physical education, in the sense of personal hygiene and school sanitation, received a good deal of attention from the School Committee of Boston during this period. For instance, it is provided in Sect. 13, Chap. II., of the Rules and Regulations of the School Committee for 1829, that, "during the season for fires, the masters may call on the

boys of the first and second classes [in the English High, the Grammar, and Writing schools] to sweep and make the fires, and during the other part of the year they may call on the boys of the third and fourth classes to sweep." In the section following, the special attention of the instructors is "required to the ventilation and temperature of the school-rooms, and the cleanliness and comfort of the scholars."

In February, 1833, Mr. Samuel A. Eliot, as chairman of a special committee "to examine the structure and location of the several school-houses," made a report to the School Committee recommending the introduction of ventilators into all Grammar school-rooms; the provision of one or more warm-air furnaces, and a thermometer for each room; and the substitution of level for inclined floors, together with improved seating arrangements for teachers and pupils. The report, which is couched in vigorous and unmistakable terms, urges that: "It is the duty of parents, and of those who act for them, to take care that the school-room, to which their children are to be confined for several hours each day, be a place which shall expose them to no disease or unnecessary suffering; that it be a place in which not merely the growth of their minds be promoted, but in which the growth of their bodies shall not be checked; where they may acquire the use of their intellectual faculties without having their physical organization distorted, or their vital powers debilitated by a constrained position or an impure atmosphere." The report declares that "it is strictly true that more care is taken of the convicts in our penitentiary, and of the ventilation of their cells, than is bestowed upon the health of the children we send to our schools, or upon the rooms in which they are assembled." In 1839, when Mr. Eliot was mayor of the City, he returned to these questions in an address before the School Board, and in addition to the recommendations above noted,

urged that less mental work be exacted of the pupils in the schools. It is fair to surmise that the following new rule, which is Sect. 11, Chapter I., of the Rules and Regulations for 1839, may have owed its passage to Mayor Eliot's zealous demands for pure air. "It shall be the duty of the masters to give vigilant attention to the ventilation and temperature of the school-room. A regular system of ventilation shall be practised, as well in winter as in summer, by which the air in the rooms shall be effectually changed at the end of each school-time, before the house shall be closed." This is the substance, and to some extent the phraseology, of Sect. 223 of the Regulations of the School Committee at present in force.

The Primary School Committee of Boston, on May 7, 1833, appointed a committee of eleven "to consider whether any and what improvements in regard to *physical education*, means of instruction, or books of study, can be made in the Primary schools." In accordance with the recommendation of this committee in its report of Nov. 5, 1833, a new rule was adopted, to the effect that "it shall be the duty of the instructors to attend to the physical comfort and education of the pupils under their care; and to this end the ordinary duties and exercises of the school shall be suspended for a portion of time, not exceeding fifteen minutes, each part of the day. This time shall be taken together or divided, at the discretion of the teacher, and occupied in conformity with the state of the weather, the season of the year, and the situation and convenience of the school-room; and in such manner as each instructor shall judge best adapted to relieve weariness, strengthen the physical constitution, excite love of order, and associate with the school ideas of cheerfulness, as well as of improvement." This rule, originally Rule 10, Chapter V., of Rules and Regulations of the Primary School Committee, 1833, has held over, in its main requirements, till the present day, and is the only

specific ordinance now in force relative to "the physical culture" of Primary school children. In the rules of the Primary School Committee for 1838, the intention of this rule is set forth in a footnote, from which we learn that the time taken was "to be spent when practicable in recreation and exercise in the open air, under the direction of the instructor or elder pupils, . . . otherwise within the school, . . . with some general and regular exercises; such as rising up and sitting down by divisions, classes, and the whole together, marching and countermarching, and simultaneous motions of the various limbs, combined and varied in accordance with the best judgment of each instructor." When the Primary School Committee was abolished in 1855, the General School Committee adopted the rule above mentioned as one of its regulations of the Primary Schools. It has been condensed and recast in some respects, but is still recognizable as Sect. 250 (p. 44) of the Regulations of the School Committee, last published in 1888.

The next most ancient rule, relating to physical exercise, is found under the head of "General Regulations of the Public Schools" (p. 40, edition of 1888, cited above), Sect. 224. It reads: "The teachers shall so arrange the daily exercises in their classes that every scholar shall have, each forenoon and afternoon, some kind of physical exercise for not less than five minutes." As originally enacted (see Rules, etc., 1853, Chapter I., Sect. 17) it reads: "The masters, ushers, and teachers in the Grammar and Writing schools shall so arrange the daily course of exercises in their respective classes that every scholar shall have daily, in the forenoon and afternoon, some kind of physical or gymnastic exercise; this exercise to take place as nearly as practicable midway between the commencement of the session and recess, and between recess and the end of the session." I cannot account for the passage of this rule, except on the

supposition that it was passed in deference to views expressed by Mr. Nathan Bishop, first superintendent of the schools in Boston, in his first and second reports, which were made, respectively, in 1851 and 1852. Mr. Bishop's views are more fully expressed in his second report: "Every plan of classification," he says, "in which the children have not frequent opportunities for practising physical exercises suited to their tender ages, must be essentially defective. A well-arranged series of physical exercises, providing frequent and gentle motions for the younger children, and requiring less frequent, but more vigorous, action, as the age of the pupil advances, would call the muscles of the chest and limbs into healthful play, in accordance with the natural laws of their growth, which can never be violated with impunity. If some of our most scientific and practical physiologists would prepare a manual for the use of parents and teachers, containing such a series of physical exercises as would tend to promote strength of body and gracefulness of motion, they would confer a great benefit upon the community." Mr. Bishop also declares that "all the younger children need provision for some gentle exercise as often as once in every half hour, such as rising, walking, marching, accompanied with such motions of the arms as would tend to give fulness and erectness to the chest." There is reason for thinking that, as early as 1842, Mr. Bishop had been instrumental in promoting "gentle exercises," such as he describes, in the public schools of Providence, R.I., where he was then Superintendent of Schools. No "scientific and practical physiologist" in America has ever written a "Manual of Physical Exercises," so far as I know.

Miss Catherine E. Beecher, who was a precursor of Dio Lewis, as an advocate and inventor of light gymnastics, published "A Manual of Physiology and Calisthenics for Schools and Families" in 1856. Her "Course of Calisthenics for

Young Ladies," published in 1832, at Hartford, Conn., is probably the first work by a native American in this field. The credit of writing the first manual of gymnastic exercises, for use in any of the Boston schools, belongs to Mr. S. W. Mason, of the present Board of Supervisors, who was master of the Eliot School in 1862, when his "Manual of Gymnastic Exercises" was published. It is worthy of note that Miss Beecher, who had previously invented "a course of calisthenic exercises, accompanied by music," professes in 1856, in the preface of her work on physiology and calisthenics, to be a disciple of Ling. She claims that her system "is arranged on *scientific principles*, with the design of exercising *all* the muscles, and of exercising them *equably* and *harmoniously*. It embraces most of what is to be found in the French and English works that exhibit the system of Ling, the celebrated Swedish professor." It must be said, that there is extremely little in Miss Beecher's book to show that she, or the writers followed by her, had grasped the principles of the Ling system, or were practically familiar with its distinctive methods.

The title of Miss Beecher's work, "Physiology and Calisthenics," is highly significant as a reminder of the agitation, then somewhat past its culmination, on behalf of the teaching of physiology and the laws of health. The origin and course of this agitation constitute one of the most curious and characteristic chapters in the educational history of Massachusetts and New England. Boston was an influential centre in this movement, whose beginnings possibly may be found in public lectures delivered by Drs. Coffin, Bradford, and Ware in 1825 and 1826. The lectures given by Dr. Spürzheim, the learned German phrenologist, in 1832, in Boston and Cambridge; the publication in 1829 of the Boston edition of George Combe's "Constitution of Man;" the lectures which Combe himself gave in Boston on Phrenology and Education in 1838; the publication of "Out-

lines of Human Physiology," by G. Hayward, M.D., of Boston," in 1834; Harper & Brothers' "republication," in 1834, of Dr. Andrew Combe's "Principles of Physiology applied to the Preservation of Health, and to the Improvement of Physical and Mental Education;" the books and articles of Dr. W. A. Alcott, and the writings and addresses of Hon. Horace Mann in this field, — all contributed to widen and deepen popular interest in physiological doctrines and their bearing upon education.

Mr. Mann's Sixth Annual Report, as Secretary of the Massachusetts Board of Education, was published in January, 1843. More than two-thirds of its 160 pages are devoted to the consideration of physiology and to advocacy of its claims to a place in the public school curriculum. Mr. Mann succeeded in securing an indorsement of his views from several leading physicians, of whom Dr. James Jackson was the most eminent. Three new text-books in physiology were published in Boston in the period 1844-7. In 1850 the Massachusetts Legislature passed a law authorizing school committees throughout the Commonwealth "to make physiology and hygiene a compulsory study in all the public schools," and requiring that all school teachers "be examined in their knowledge of the elementary principles of physiology and hygiene, and their ability to give instruction in the same." There is ample and indubitable evidence that Mr. Mann's zeal and enthusiasm, for the dissemination of information regarding the structure and functions of the body, grew directly out of his acquaintance with George Combe and his writings. Mr. Mann, like most of the educational writers of his time and country, gave expression to the most elevated and eulogistic sentiments regarding "physical education," but usually employed the term in a very vague and comprehensive sense. So far as I can learn, Mr. Mann never went so far as to propose any working scheme of school gymnastics. Yet he was not altogether

unfamiliar with gymnastic procedures, as is shown by his lively and laudatory mention in the "Common School Journal" for June 10, 1845, of two Boston gymnasia, then in vogue, but now forgotten. These were the "excellent gymnastic school kept by Mrs. Hawley, for young misses," and the then recently opened and elaborately furnished gymnasium of Dr. David Thayer, in Boylston Hall, Washington street. While the agitation on behalf of "the laws of life and health" was not signalized by any well defined attempt to incorporate gymnastic or calisthenic training in the system of public instruction, it did serve to perpetuate certain well marked tendencies of the period 1825-30, and to prepare the way for the "Gymnastic Revival" of 1860.

Diocletian Lewis, commonly called Dr. Dio Lewis, is popularly considered a sort of gymnastical Peter the Hermit, to whose preachings and teachings the Crusade of the New Gymnastics was chiefly due. Most certainly he was an extremely active and fluent personage, and exerted not a little influence in various directions; but his main service, as regards gymnastics, lay in the skill with which he raked together the embers and fanned the flames that had been kindled by others. We have abundant evidence that there was a growing interest in gymnastic and athletic forms of exercise in the latter half of the decade ending in 1860. Such evidence is to be found in the efforts to secure funds for the erection of school and college gymnasia; in the increased addiction of collegians and others to rowing and ball matches; in the instant popularity achieved by the Tom Brown books; in the interest excited by the lectures and exhibitions of Dr. G. B. Windship, whose public career as an exponent of heavy lifting began in Boston, in 1859; and in the prominence given to topics relating to physical education in general, and school gymnastics in particular, by speakers at teachers' conventions and institutes, by the conductors of educational journals, and by public school officials.

Symptoms of the new awakening among Massachusetts educationists became pronounced as early as the year 1857. In his report for 1857, the Secretary of the State Board of Education, Mr. George S. Boutwell, declared: "As a community we have no physical training whatever; and there is great danger, as the population of the State is aggregated in villages and cities, and an increasing proportion of the people are employed in sedentary pursuits, that a pernicious change will be wrought in the character of the Commonwealth. Many modern school-houses are wisely furnished with sufficient playgrounds, and provision has been made for gymnastic exercises. Such arrangements seem to be necessary in the cities." Appended to Secretary Boutwell's report are extracts from nearly one hundred school committee reports, which extracts are printed under the caption of "Physical and Moral Education." Most of the extracts are disquisitions on morals and manners. Seven of them, however, treat more or less directly of physical education. Of these, the extract from the report of the school committee of Easton is by far the fullest and best, and is especially noteworthy, because it contains a circumstantial and appreciative account, written by an American observer, of the *Swedish school gymnastics*.

In his report for 1858, Secretary Boutwell elaborates his views relating to physical training, which he takes to mean gymnastics. He goes so far as to favor the shortening of the school-day, particularly in Primary schools, and suggests "*the establishment in cities and large towns of public gymnasiums, where teachers answering in moral qualifications to the requisitions of the laws, shall be employed, and where each child for one, two, or three years shall receive discreet and careful but vigorous physical training*. After a few years thus passed in corresponding and healthful development of the mind and body, the pupil is prepared for admission to the advanced schools, where he can submit,

with perfect safety, to greater mental requirements even than are now made."

Secretary Boutwell's report is dated December 31, 1858. It is interesting to find Superintendent Philbrick, in his Seventh Quarterly Report, on the 7th day of the same month, calling the attention of the School Committee of Boston to the claims of physical education in the following words: "We have educated the intellect. But it is now beginning to be seen that body with mind is necessary to produce intellect; . . . while intellect is in training, the conscience and the body must not be neglected. . . . The next step is to provide the requisite means for increasing the vigor of the body and the development of the moral nature, so far as is consistent with the proper objects of a system of public instruction." As these words were penned nearly two years before Dio Lewis secured the ear of the Boston public, it would be a violent assumption to attribute Superintendent Philbrick's views on physical education to the teachings of the apostle of the new gymnastics.

As further evidence of the general awakening among teachers to the claims of physical education, the following citations from the proceedings of the meetings of the National Teachers' Association at Buffalo, and the American Institute of Instruction at Boston, in the month of August, 1860, may suffice. At Buffalo, the following resolutions were debated on August 8: "*Resolved*, That this Association recognizes a thorough and judicious system of physical culture, as the only basis for the full and complete development of our mental and moral faculties; and that any system of instruction which does not actively recognize the importance of physical education fails in accomplishing the great end of education. *Resolved*, That we urge upon school committees and others in charge of public instruction the propriety of introducing into all our schools, by positive enactment, the careful observance on the part of teachers of a system of

school-room gymnastics adapted to the wants of all grades of pupils." At Boston, the question that called forth the most interest and discussion was, "Is it expedient to make calisthenics and gymnastics a part of school-teaching?" The discussion occupied the morning sessions of the Institute, at Tremont Temple, on August 21 and 22. Dio Lewis, who had taken up his residence at West Newton a few months before, was called on as "one who had given special attention to the subject." He made some characteristic remarks, which led to the appointment of a committee to visit his newly established gymnasium in Essex street. August 22 the committee made a complimentary report; and an exhibition illustrative of the Lewis gymnastics, under Dio Lewis' direction, was given before the Institute. The exercises consisted of club-swinging and class exercises with bean-bags and with wands, together with a variety of free movements. A number of gentlemen from the audience took part in the exercises, and "there was much merriment among the actors as well as amusement for the audience." A resolution pronouncing the Lewis gymnastics "eminently worthy of general introduction into all our schools, and into general use," was unanimously passed. The fact that Dr. Wellington, of this city, called attention to the Ling gymnastics, in the discussion which followed the passage of the resolution, has been noted by Dr. W. A. Mowry, in his interesting report, as chairman of the Committee on Physical Training, June, 1890. Dr. Wellington expressed his preference for "slow, steady movements," as used by Ling to the more rapid movements presented by Lewis. He considered it "of great importance that teachers should understand the leading features of this [*i.e.* the Ling] system. However, he would indorse the exercises employed by Dr. Lewis as the best he had ever seen for introduction into common schools."

As was noted above, the Gymnastic Revival of 1860 was not a thing apart but grew out of the crusade for popu-

larizing physiology and hygiene, if, indeed, it be not better described as a phase or continuation of that crusade. It was wholly natural that Dio Lewis should figure in both movements. He was by nature an enthusiast, a radical, and a free lance. He was born and bred at a time when advocacy of the doctrines of temperance, anti-slavery, phrenology, physiology, and of educational reform savored more or less of ultra-liberalism, or even "free-thinking." Before his first public appearance in Boston, at the Tremont Temple, where he may be said to have stormed the key to the situation, by his capture of the American Institute of Instruction; Dio Lewis had travelled extensively, for some years, in the Southern and Western States, as a week-day lecturer on Physiology and Hygiene, and as a Sunday orator on Temperance. He had given some attention to physical education, withal, and, being well versed in the arts of the platform, was quick and apt in taking advantage of the growing interest in gymnastics. He was unconventional, sympathetic, plausible, oracular, and self-sufficient, and the time was ripe for a gymnasiarch of that sort. The doctrines and methods of the Lewis gymnastics, which were novelties and seemed original to most of his followers and imitators, spread rapidly over the whole country, and, if we may credit certain eulogists of the system, even into "Europe, Asia, and Africa." His skill in securing the aid and backing of educationists and notabilities contributed materially towards making Dio Lewis the most conspicuous luminary for a time, in the American gymnastical firmament. He was in great demand as a lecturer before normal schools, teachers' associations and institutes, and Lyceum audiences; and his contributions to the "Massachusetts Teacher," "Barnard's Journal of Education," and the "Atlantic Monthly," etc., were eagerly read and favorably received. He was medical-practitioner, lecturer, editor, gymnasium-manager, teacher,

hotel-proprietor, and preacher by turns; besides which he served out a part of one term in the Boston School Committee, to whose deliberations he appears to have contributed nothing of moment. In short Dio Lewis was a revivalist and agitator, and not a scientist in any proper sense. His originality has been much over-rated, — very few of his inventions, either in the line of apparatus or of methods of teaching, being really new. In his "New Gymnastics for Men, Women, and Children, Boston, 1862," which reached its eighth edition in two years, and in his "Weak Lungs and How to Make them Strong, Boston, 1863," he borrowed lavishly from German sources.

Of "the Boston Normal Institute for Physical Education," which he established in 1861, Dio Lewis declared: "this Institution is presumed to be the first ever established to educate guides in Physical Culture." This statement was indeed presumptuous, inasmuch as the Prussian government had maintained a Normal School of Gymnastics, in Berlin, since 1851; the Royal Normal School, for Teachers of Gymnastics, in Dresden, had existed since 1850; and the Royal Central Gymnastic Institute, of Stockholm, dated from 1814. The Boston Normal Institute had two terms a year, of ten weeks each; and in the seven years of its continuance, 421 persons were graduated from it. The valedictorian of its first class, Miss Abby W. May, became a distinguished member of the School Committee of Boston in later years. The establishment of the Boston Normal Institute for Physical Education was a really new departure — in America — (unless perchance the *Turnlehrer Seminar* of the North American Turnerband antedated it), and constituted, perhaps, the most considerable and solid of Dio Lewis's contributions to the cause of physical education. He is also deserving of praise and credit for convincing the public of the utility of light gymnastics, and for his influential aid in popularizing gymnastics for school children

of both sexes. It is probable that the "New Gymnastics" would have developed more fully and satisfactorily but for the outbreak of the War of the Rebellion, and the consequent predilection of boys and school-managers for military drill as a school exercise.

On September 11, 1860, or less than a month after the American Institute of Instruction had pronounced the Lewis gymnastics "eminently worthy of introduction into all our schools," Superintendent Philbrick presented his First Semi-annual Report to the School Committee. The main topic of the report was the want of physical training in the Boston schools, and the proper remedy for that want. "Under the present conditions of city life at home and at school," he said, "a child stands a poor chance to enter upon the career of life having a good physical system, a body healthy, strong, well-formed, and of good size. . . . The practical question for us is, what ought to be done *in our schools* to arrest physical deterioration? . . . *The principal remedy which I would suggest is the introduction into all grades of our schools, of a thorough system of physical training, as a part of the school culture. Let a part of the school time of each day be devoted to the practice of calisthenic and gymnastic exercises, in which every pupil shall be required to participate.* . . . The exercises which I would recommend, can be practised without costly apparatus, and without a room set apart for the purpose; they contain all that either sex needs for the perfect development of the body, and are adapted to mixed schools, so that both sexes can perform them together." Superintendent Philbrick was Editor of the "Massachusetts Teacher" for November, 1860, and gave the first place, in the number for that date, to an article by Dio Lewis on "Physical Culture." The article contains the following passage: "In Boston, every school-house should at once be provided with a fine playground, and a complete

gymnasium should be added by raising the roof of the building, and introducing one or two new stories. A large quantity of apparatus for both yard and gymnasium should be provided. Every boy and girl in attendance should be conducted through an elaborate course of bodily training. If they are now kept in school six hours each day, let them be kept seven, under the new *regime*, and devote during the first year one hour per day; during the second year, two hours each day, and from the beginning of the third year three hours each day to physical training."

The Special Committee to whom Superintendent Philbrick's recommendations were referred on September 11, made a report on December 10, 1860, which was in accord with those recommendations, and not with the elaborate and ambitious scheme outlined by Dio Lewis in the "Massachusetts Teacher." The report voiced the rather panic views which were then current regarding physical degeneracy; but is chiefly remarkable for its categorical preference for the "Ling Free Gymnastics." "This system," (i.e. the Ling), said the Committee of which Mr. G. W. Tuxbury was Chairman, "it is deemed both desirable and practicable to introduce into all our schools, and it is recommended that it be made an obligatory branch of education." The Committee further recommended: (1) the appointment of a Standing Committee on Physical Training; (2) the authorization of said committee to appoint and nominate "a suitably qualified person to aid and instruct the teachers in the training of their pupils in physical exercises;" and (3) that not more than a half nor less than a quarter of an hour be daily devoted to such exercises. These recommendations did not receive the sanction of the School Board until December, 1864, and then only in a modified form. Objections were made to the proposed plan, as we learn from the Annual Report of the School Committee for 1861, "because it created a new committee and another teacher; and it was feared it would

add to the pupils' tasks instead of relieving them. It is thought by some that the end in view might be gained by the general observance of the present rule, which provides that every scholar shall have daily, in the forenoon and afternoon, some kind of physical or gymnastic exercise. . . . In the Dwight, and in several other schools the present regulation is complied with faithfully." The report notes the fact that increased attention had been shown, within the year, to gymnastics in the English High School, and in the Eliot, Mayhew and Hancock Grammar Schools. In his report, dated September 10, 1861, Mr. Philbrick notes the same fact with satisfaction, and adds, "but in the great mass of the divisions, nothing worthy of the name of physical training has been attempted, and from what I have seen, I think there is danger of harm from injudicious exercises unless this branch is under the instruction of a competent and responsible instructor, who understands not only gymnastics, but also the principles of anatomy, hygiene, and physiology."

It is worthy of remark that the recommendations made by Mr. Tuxbury's committee, in December, 1860, were adopted by the School Board of Cincinnati, Ohio, almost without alteration, nearly four years before the Boston School Committee took final action upon them. In the report of a special committee which was submitted early in February, 1861, to the Cincinnati School Board, we read that "each member of the Board having in his possession a printed Report on Physical Training in the Boston Schools, the Committee deem any further remarks on the utility of free gymnastics unnecessary." Accordingly the Cincinnati Board adopted the main recommendations of the Boston report, and voted to appoint two special teachers of gymnastics who should teach the same as an experiment in six selected schools,—the time allowed for the daily practice of gymnastics in those schools being limited to a quarter of an hour,

instead of thirty minutes, as was provided in the Tuxbury report. This promptitude on the part of the Cincinnati School Board may be explained, perhaps, on the ground that they were better prepared for decisive and intelligent action, by reason of the fact that the Turners' Societies of that city had already demonstrated the adaptability of the German free and light gymnastics, to the purposes of school instruction. At any rate, when it was finally voted to provide instruction in gymnastics and military drill for the schools of this city, it was by many years too late to reap the full advantage of Superintendent Philbrick's suggestion that "Boston, the cradle of the great system of free popular education, should take the lead in showing to the world" how to remedy the defect of neglected physical education. Even in 1860 "the world" was tolerably familiar with several well ordered and successful systems of school gymnastics.

Meanwhile the most effectual of the attempts made to improve the gymnastics, authorized by the Rules of the School Committee, then in force, was that instituted in 1860 by Mr. S. W. Mason, then Master of the Eliot School, — now one of the Board of Supervisors. Mr. Mason has kindly furnished me the following account of his experiment: "I started gymnastics in 1860. I had only seen a class under Dr. Dio Lewis practice gymnastics on the platform at Tremont Temple, and I was so delighted that I determined at once to try them in the Eliot. By reading books in which Ling's system was described, and by practising with my own boys, I became so enamored with the system, and my boys so improved mentally and physically (laggards soon becoming leaders) that I was determined to make my boys proficient in the few exercises we had. I was invited to attend State and County Conventions, teachers' institutes, etc., to lecture and demonstrate the feasibility of introducing gymnastics into our schools, by exhibiting a class of boys. I was frequently importuned by teachers to furnish them

with a list of exercises. In response to many teachers, I made the manual, having in it only such exercises as had been used in the Eliot. The manual was published in 1862, and was used by many schools in Boston and vicinity." "Barnard's Journal of Education," vol. xiv., 1864, pp. 61-68, contains an article by Mr. Mason, on "Physical Exercise in School," which sets forth his views and the results of his experience at some length.

Despite the applause and favor bestowed on the Lewis gymnastics at the outset, rivals to their supremacy soon appeared in the field. Of these, vocal culture and military drill proved the most formidable and enduring. Mr. Lewis B. Monroe, a well known teacher of reading and elocution in Boston, had developed "a system" of vocal and physical exercises that had many adherents. Mr. Monroe grew to be quite as acceptable and influential a lecturer at teachers' conventions and before normal-school audiences, as was Dio Lewis. Moreover, Mr. Monroe was, from the first, the man of Superintendent Philbrick's choice for the work of aiding and instructing the teachers in the physical training of their pupils. He was finally appointed to the post in question, in 1865.

Military drill began to attract the attention of educational authorities early in 1861, when the Chauncy Hall School, in Boston, and certain of the public schools of Brookline organized school companies for martial drill and parade. In 1862 Congress passed the so-called Morrill Act, granting thirty thousand acres of the public lands for each of its Senators and Representatives to every State which should "provide at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts." The incongruous and rather unreal militarism of the Massachusetts Agricultural College and the Massachusetts Institute of Technology still exists, thanks to the proceeds derived from

the lands granted by the National Government. The Massachusetts Legislature of 1863 devolved upon the State Board of Education the task of considering the advisability of making military drill a regular part of the public school training of boys, more than twelve years old, throughout the State. A favorable report on the matter, drawn up by a sub-committee consisting of Governor Andrew, Hon. Emory Washburn, and Hon. Joseph White, Secretary of the Board, was adopted by the Board. The recommendations of the Board of Education were embodied in two bills, that were advanced two stages toward enactment by the Legislature of 1864; but owing to the efforts of Messrs. Wm. Lloyd Garrison, N. T. Allen, James Allen, Dio Lewis and others, these measures were defeated, and the scheme was dropped.

On November 3, 1863, a petition asking for "a speedy introduction . . . of Military Drill and Discipline into the public schools as a part of the daily exercises," was received by the School Committee of this city. The petition set forth the belief of its signers "as parents that the hygienic effect of a thorough military training would not only be the physical exercises so long talked of for our public schools, but it would inculcate a more manly spirit into the boys, extend their memory, make them more graceful, invigorating and gentlemanly, and by the time they attained the age of sixteen or eighteen years, they would be competent to enter the field either as Privates or Officers." At the same meeting a committee of five, with Hon. George S. Hale as Chairman, was appointed to consider the matter and report upon it. On December 8, 1863, the committee reported, being of the opinion that it was "expedient to introduce instruction in military gymnastics and drill into the Public Schools for boys, . . . and that the instruction should be given by the teachers, and, after a time, in large measure by pupils selected for that purpose under their

supervision," . . . and recommended a trial of the experiment in the Latin, English High, Eliot, and Dwight Schools, one-half hour on Monday, Wednesday, and Friday of each week, "by obtaining a competent instructor in gymnastics and drill, who should instruct some or all of the masters and ushers." On the twenty-second of the same month the School Board authorized Mr. Hale's committee to carry its recommendations into effect. Accordingly Captain Hobart Moore was engaged as Teacher of Military Drill. He has continued to serve in that capacity up to the present time, a period of nearly thirty years! In their report, submitted on December 13, 1864, the "Committee on Military Gymnastics and Drill," note with satisfaction the measure of success which had attended the introduction of military drill in the schools mentioned above. Regret is expressed because "they have not yet made any satisfactory arrangements for instruction in gymnastics independently of the drill, but they all concur in recommending that regular and systematic instruction of that kind should be given.

. . . They are convinced that it is of very great importance to furnish instruction in gymnastic exercises for the younger male and all the female scholars." The practical suggestions of the committee were embodied in the following orders passed by the School Committee, December 27, 1864:

Ordered: That a Standing Committee of five on Gymnastics and Military Drill be hereafter appointed, whose duty it shall be to enforce the regulations on this subject and to superintend this branch of instruction, making from time to time such recommendations to the General Committee as they shall find expedient.

Ordered: That said Committee be authorized forthwith to employ an Instructor in vocal and physical gymnastics, at a salary not exceeding fifteen hundred dollars per annum, whose duty it shall be to attend the schools at such times and for so much of the time as the Committee shall deem necessary, upon consultation with him and the District Committees, for the purpose of instructing in gymnastic exercises, both vocal and

physical, and of securing careful and regular performance of those exercises at such hours as may be convenient, provided, that not less than twenty minutes per day shall be devoted to this purpose in any grammar school, and not less than thirty minutes in any primary school, in addition to the ordinary recess.

Ordered: That the said Committee, upon consultation with the District Committees, be also authorized to arrange the Grammar Schools containing male pupils into groups, so that the boys of sufficient size to drill with arms, and in numbers sufficient to form a military company, may be instructed together in military drill by a suitable instructor to be employed by the Committee; the hours of drill not to exceed two per week, except voluntary drills out of school hours; and no expenditure exceeding fifteen hundred dollars per annum to be incurred for these purposes without the prior authority of the whole Board.

These orders constitute the "Great Charter of Physical Training in the Boston Schools." The first Committee on Gymnastics and Military Drill, under its provisions, was appointed early in 1865, and comprised the following named gentlemen: George Hayward, M.D., *Chairman*, Edward H. Brainard, J. Baxter Upham, M.D., Robt. I. Burbank, and William B. Towle. Dio Lewis, then a member of the School Board, is conspicuous by his absence from this Committee. It should be noted that Messrs. Fowle and Hayward had been prominent as pioneers in physical education, nearly forty years before. The transitory nature of "Standing Committees" is illustrated by the fact, that in 1868 only one of the original members of the above mentioned Committee was still a member of it.

Dr. Hayward reported, for the Committee on Gymnastics and Military Drill, on December 12, 1865. This report was not printed. From it we learn that Mr. Monroe having met the committee January 20 of that year, and explained his system of physical exercises and vocal gymnastics, to the satisfaction of the committee the latter had unanimously voted to pay Mr. Monroe \$1,500 for the year ending January 31, 1865, for devoting two hours, in each school day, to the

instruction of the pupils of certain selected schools, viz. the Girls' High and Normal School, the Training School and the first class of the Bowditch School. As a matter of fact Mr. Monroe had given thirteen hours' instruction weekly in the schools named; besides which he had given lectures and conducted exercises for the benefit of teachers and pupils in various other schools. The committee had frequently witnessed Mr. Monroe's exercises. "These exercises consist," the committee go on to say, "not only in teaching the pupils to develop their vocal organs and properly to expand their chests; but to stand in an erect position, to walk gracefully and firmly, and to strengthen their muscles by light and easy gymnastics. Their chief advantage is that they improve the physical powers and condition of the pupils; but they incidentally teach them to pronounce the English language correctly and in a full round sonorous tone; thus doing away with that nasal articulation with which Americans have been so often reproached." One hundred and thirty teachers in various grades were pronounced competent instructors of the system;—teachers' classes having been formed in May, for teachers in the Hancock, Brimmer, Wells and Bigelow districts, who desired "practical drill and careful instruction in precisely those exercises they should give their pupils." Military Drill had been taught by Capt. Moore, in the Latin and English High Schools, and in the upper classes of the Eliot and Dwight Grammar Schools; but the drill had been discontinued in the two schools last named during the latter part of the year. This discontinuance was permanent, I may add. In addition to the \$1,500 appropriated for Mr. Monroe's salary, \$1,150 had been expended to meet the cost of rent, salary, arms, etc., entailed by the military drill. The committee asked and obtained an appropriation of \$4,000 to enable it to secure "Mr. Monroe's whole time during school hours, or its equivalent." Mr. Monroe's salary was afterwards fixed at \$3,000

a year. In 1867, Mr. A. E. Sloane was appointed to assist Mr. Monroe, at an annual salary of \$1,800, which was increased to \$2,500 in 1868. July 14, 1868, the School Board appropriated \$6,700 for the salaries of instructors then under the supervision of the "Committee on Vocal and Physical Culture and Military Drill," which continued to be the title of the committee until 1876, when the department of "Vocal and Physical Culture" was practically abolished, and a Standing Committee on "Military Drill" was instituted.

The work of Mr. Monroe and Mr. Sloane was conducted along the lines indicated above, and consisted in the instruction of the pupils of such schools as they could find time to visit during school hours, *and the holding of normal classes for teachers, on holidays and evenings, attendance on which was voluntary.* It is clear from Superintendent Philbrick's notice of these classes in his Eighteenth Semi-annual Report, in 1869, that much interest was shown by the teachers in the classes referred to, and that the attendance upon them was good. "That our schools have been greatly benefited by the instruction of this department," said Mr. Philbrick, "no longer admits of doubt in the minds of intelligent and unprejudiced persons. It is scarcely impossible to overrate the value of the improvement in reading which has been produced. . . . The physical training has not proved . . . a complete antidote for the mischievous effects of high pressure. . . . I rejoice in what has been achieved ; but I am by no means satisfied with the present attainments in this direction. I frankly confess that I regard all that has been accomplished only as a beginning. We must not relax our efforts. *We must be satisfied with nothing short of a complete revolution in respect to physical education.*" In July 1870, a revolution came, but probably not of the kind desired by Superintendent Philbrick. The offices of instructor and assistant were discontinued by the Board, at the recommendation of the standing committee in charge of

physical and vocal training, and Mr. Monroe was appointed Superintendent of Vocal and Physical Culture, "to devote three months of each year to the training of the masters and teachers of all our schools, for the personal fulfilment, in their various divisions, of the work heretofore assigned to the instructor and his assistant. . . . With the aid of the excellent little Manual which he has published he [Mr. Monroe] can in three months see that all our teachers are qualified to do the work themselves." In 1871 Mr. Monroe's name appears for the last time on the roll of teachers in the schools of this city.

In 1872, Mr. W. J. Parkerson was appointed to give instruction in vocal culture for a period of three months. "Rooms were secured in the old Normal School-house, in Mason street, and arrangements were made for daily lessons to be given to classes of teachers of the different grades, at such hours as were supposed to be most convenient for them." It was found that the teachers were too much occupied with their extra drawing lessons to profit fully from the instruction offered them in vocal culture, and the committee were "constrained to admit that the results produced did not meet their expectations." Mr. Moses True Brown, served as Superintendent of Vocal and Physical Culture, for three months in 1873, and for six months in each of the years 1874 and 1875, at a salary of \$2,500 for each period of six months; but the department seems to have been beyond resuscitation, and was abolished in 1876. Excepting certain scarcely recognizable rules and regulations, and Monroe's "Vocal and Physical Training," still retained in the list of text-books; the special teachers of vocal and physical culture in the Girls' High and Latin Schools are the only organic survivals of the system of physical training introduced by Mr. Monroe.

It was not until 1867 that the Rules and Regulations of the School Committee were amended so as to conform in set

terms to the "Orders" passed December 27, 1864. In Chap. I. Sect. 2, Rules and Regulations, for 1867, the "Committee on Vocal and Physical Culture" appears in the list of the "Standing Committees" for the first time. Chap. IV. Sect. 9, (*ibidem*) sets forth the functions and jurisdiction of the Committee just mentioned; while Chap. V. Sect. 2, prescribes the salaries of the instructor and his assistant. Chap. XI. Sect. 11, (*ibidem*) provides that: "Vocal and physical exercises shall be taught by the Instructor and Assistant in that department under the direction of the Committee on Vocal and Physical Culture; and each Teacher shall give careful and regular attention to these exercises for not less than twenty minutes each day." The time required for exercise was cut down from twenty minutes to ten minutes in 1871, when the above Rule was changed in accordance with the vote passed in July, 1870, discontinuing the offices of instructor and assistant. The amended Rule (being Sect. 11, Chapter XIII. Rules and Regulations, 1871) became Sect. 234, Chapter XVI. of those of 1876, which forms the substance of Sect. 264, Chapter XVII. (p. 45) Regulations of the Grammar Schools (Edition of 1888), and is still in force, reading as follows: "All the classes shall be instructed so that they can take proper physical exercise in concert, in the school rooms, and the teachers shall give careful and regular attention to such exercise for not less than five minutes each session."

Sect. 10, Chapter XII. in Rules, etc., 1867, is found among the Rules of the Latin School. It reads: "Instruction in Military Drill shall be given under the general supervision of the Committee on Vocal and Physical Culture, who are authorized to provide a suitable place and arms for drilling and to appoint a drill-master. The time occupied in drills shall not exceed two hours each week." The above is repeated in identically the same terms, as Sect. 12, Chapter XIV. (Rules, etc., 1867). The regulation now in force as to Mili-

tary Drill, viz. Sect. 283, Chapter XVIII. Rules and Regulations of the School Committee, 1888, is as follows: "Instruction in military drill shall be given in the High Schools, under the charge of a special drill officer, to all boys of good physical condition, who are thirteen years old or more. The time occupied in drill shall not exceed two hours in each week." This rule, in its present form, dates from 1878. Excepting the so-called "setting-up exercises" contained in the Tactics, gymnastic exercises have never been attempted except spasmodically and sporadically in the course of instruction laid down for the boys of the Boston High Schools. Thanks to the energy and foresight of Superintendent Seaver there is a commodious and well furnished gymnasium, over the Drill Hall, set apart for the use of boys belonging to the English High and Latin Schools; but, as I have already remarked, it has never been found feasible to organize thorough going and genuine gymnastic teaching in connection with this gymnasium. Superintendent Seaver on March 31, 1881, in his first report which was the first of the series of annual reports of the Superintendent of Schools, reports "that there is money ready for the purchase of apparatus, but there are some questions as to the nature of the instruction to be given and the kinds of apparatus to be used that need to be definitely settled before any outlay is made. Without a good system of instruction and without proper supervision of the exercises the boys will profit little by the use of the gymnasium. . . . In making out a course of physical training for our Latin and High School boys, we probably could not do better than to follow, in general, the example of the Hemenway Gymnasium in Cambridge." The course pursued at Cambridge, outlined in a letter from Dr. Sargent, is then given. The gymnasium was furnished with a set of the Sargent developing appliances in due time, but, no thorough going system of instruction having been put in operation, comparatively

little use has ever been made of them. Military drill seems to be considered a satisfactory substitute for gymnastics in the schools in question.

One finds in studying Superintendent Philbrick's reports, which extend over nearly twenty years, that his views regarding school sanitation and scholastic hygiene underwent a steady expansion and growth. This is strikingly the case as regards his reiterated expressions of opinion upon matters pertaining to physical training. He found ground for encouragement in every measure, no matter how feeble and halting, for the improvement of the physique of the school children; at the same time he never felt satisfied that any very flattering progress was made in this direction, excepting in military drill. Within the period 1860 to 1876 inclusive, direct reference to physical training, in one or another of its phases, was made at least twelve times by Mr. Philbrick in his reports to the School Committee. The report of September 1869, which notes the character and progress of the work prosecuted by and under Messrs. Monroe and Sloane; the report of September 1872, in which a review of twelve years' progress is set forth; and the reports dated respectively September 1874, and December 1876, are worthy of special mention. In the 1872 report, having noted the changes whereby the average physical condition of the pupils in the schools, during the previous twelve years, had been improved, Mr. Philbrick feels "bound to say, and to say with emphasis, that there is still great room for improvement in physical culture. *We ought to aim, not merely to AVOID INJURING the health of pupils while carrying on their instruction in our schools but TO INCREASE their physical health, strength and beauty.* . . . You may say that the exigencies of modern society demand some sacrifice of physical health and strength to intellectual attainments. For one I deny the soundness of this doctrine altogether. Complete

physical health and development is essential to the truest and best intellectual results of education. . . . All we have done in the interest of school hygiene during the past twelve years, is far, very far from being what we can safely accept as a satisfactory finality. It is in truth only a *beginning* of the vast work yet to be accomplished, if we mean to make our system of education a complete success." Mr. Philbrick visited Europe, in 1873, and was much impressed, as well he might be, by the superiority of the German school gymnastics to the American. In his report for 1874, Mr. Philbrick says: "The all-important point has been gained of securing a general *recognition of gymnastics as a branch of school culture*. It remains to be fully provided for and developed." This is his summing up of the outcome of the whole Monroe and Lewis movement so far as the Boston schools were concerned. Then he goes on to say: "After witnessing the methods, means and results of gymnastic training in European schools, I am more than ever anxious that it should receive greater attention in America. In Vienna, every modern school-house has its gymnasium, and every school, one or more gymnastic teachers, — *one hundred and ten* special teachers of this branch being employed in the public schools of the city."

In his report for 1876, Superintendent Philbrick devotes some twenty-five pages to the subject of "School Hygiene." His remarks on physical training, contained therein, well repay perusal, as they not only show how his views had been enlarged and clarified since his first presentation of them in 1858, but also because they constitute the fullest and most forcible treatment of the subject to be found in the annals of the School Committee, in the interval between Mr. Tuxbury's report, in 1860, and Mr. Peterson's report on physical training, presented in the name of the Board of Supervisors, in 1889. I append some of the most striking passages in what proved to be Mr. Philbrick's last communi-

cation to the School Board on the subject of physical training:

Twelve years ago a special teacher of vocal and physical culture was appointed by the Board to direct and instruct the teachers in this two-fold branch of Education. That teacher, Professor L. B. Monroe, exerted a most beneficial influence in our schools, although he was too little encouraged and seconded in his efforts. The system of gymnastics taught by him is excellent, so far as it goes; but it does not comprise all that is required in a complete system of physical training. . . . Since the discontinuance of his services there has been apparently no progress in physical training in our elementary schools. Even a backward step in this matter seems to have been taken in the new regulations, in cutting down the time allowed to physical exercise. Now every scholar must have each session not less than five minutes of physical exercise, whereas previously the requirement was ten minutes each session. From my observations in the schools during the last half year, I conclude that there are schools where even the present infinitesimal requirement is disregarded. On the other hand, special provisions were made for the regular and systematic gymnastic training of the pupils of the Latin School, in a well-furnished gymnasium, by one of the masters who had enjoyed the benefit of the excellent system of culture at Amherst College. The Girls' High School has a good gymnasium, and the pupils have received a limited amount of regular instruction in it. *A Swedish lady, thoroughly qualified*, both practically and theoretically, to teach the Ling system of free gymnastics, was employed in this school for a time, [in 1874] with apparently excellent results, and it is to be regretted that her services were not continued. . . . No school-rooms in the world are better adapted than our own for free gymnastic exercises. But besides the frequent brief periods of exercise in the school-rooms, a longer and different drill should be given once or twice a week in a gymnasium, such as any of our grammar-school rooms would make; and I should be glad to see one of the school-rooms in each of our grammar-school buildings set apart for this purpose. . . . Three years ago I visited the Victoria School, in Berlin, which is, perhaps, in point of merit, second to no other public high school for girls in Europe. After looking over its excellent accommodations, . . . I was invited to attend the gymnastic lesson of the upper classes. This was given in the Städtische Turnhalle (City Gymnasium), a large fine building, with every appliance and convenience requisite for its purpose, which is in the immediate vicinity of the school. From a hundred to a hundred and fifty of the older

girls were present. The exercises were not conducted by special teachers, but by regular professors in the school, who had qualified themselves to teach this branch. The system of training was in all respects admirably adapted to the age and sex of the pupils. As I viewed that spectacle I was more strongly impressed than ever before with the value and importance of appropriate gymnastic training for girls. The subject was not new to me. For many years it had to a considerable extent occupied my attention. But the illustration then witnessed carried to my mind that sort of conviction which lasts as a motive to action; and that conviction is felt at the present moment as a motive impelling me to urge the importance of gymnastic training in schools.

Superintendent Philbrick's recommendations as set forth above are more explicit, more forcible, and wiser than were those presented by him in 1858 or 1860. But physical training, excepting the department of athletic sports was not in fashion, either with the general public or in educational circles, in 1876,—accordingly his words fell upon indifferent or preoccupied ears, and led to no result. The experiment of making physical training a feature of the Latin School course became moribund about the time the above allusion to it was penned. A new era in college gymnastics opened in 1879, but it was not until 1889 that any considerable or vital interest in school gymnastics declared itself in Boston, or even in New England, outside of a few preparatory schools.

The worth of a good physique and the educational value of physical training were most clearly demonstrated and sharply emphasized by the lessons of the late war. The unexampled interest and activity in athletic sports developed since the close of the war have contributed most materially toward the promotion and appreciation of physical training.

Next to the athletic revival, the cause of physical education in America has received its greatest impetus, in recent years at least, from the organization by Harvard University, in 1879, of a new department of physical training in connec-

tion with the Hemenway Gymnasium, for whose erection and equipment Mr. Augustus Hemenway, of Boston, and a graduate of Harvard in 1876, gave the sum of \$115,000. To Dr. D. A. Sargent, the director of the Hemenway Gymnasium since its opening thirteen years ago, we owe the invention of the so-called Sargent system of developing gymnastics. The Sargent system, which in its original or modified form has been adopted in most of the college and Y. M. C. A. gymnasias of the country, is the most original contribution that America has made to the cause of physical training. The Sargent gymnastic machines, numbering nearly sixty, employ the so-called "pulley-weights" in variously modified combinations, so as to call certain groups of muscles into action, while comparatively little muscular action is called for in the rest of the body. By the use of these machines one can exercise his back, loins, thigh, forearm, arm or hand muscles, according as his own taste or the opinion and advice of his instructor may dictate. The director of every gymnasium, where the Sargent system is in vogue, habitually makes a careful physical examination, on which he bases his prescription of such exercises as will tend to remedy defects and promote symmetrical growth and harmonious development, in each particular case. The Sargent gymnastics are dietetic rather than strictly educative in their aims, and most of the Sargent machines are not well adapted to the purposes of class-gymnastics; most well equipped gymnasias therefore are furnished with heavy apparatus of the very kind that Dio Lewis professed to have driven from the field.

Dr. Sargent's idea of scientifically directing and controlling gymnastics and athletic work is thoroughly admirable and practical; but the effect of using the Sargent apparatus stops short of muscular development in its higher sense, since by means of "pulley-weights" it is possible only to enlarge and strengthen the muscles, without teaching skill and discrimination to the nerve centres with which the

muscles are connected and by which they are animated and controlled. The use of the Sargent machines may promote the healthful nutrition of muscles, nerves and brain, but does not tend to develop sleight or skill directly, which should be one of the aims of every comprehensive system of physical training. It is safe to say that seven-tenths of all the gymnasia in the country contain larger or smaller collections of the Sargent developing appliances; but so far as I know, no public-school board has provided them for the use of all the pupils in any grade.

The completion of the Hemenway Gymnasium and the induction of Dr. Sargent as its Director, in 1879 gave a great impetus to the improvement of then existing gymnasia and the erection of new ones; while the rapid spread of the Sargent system of "Developing Exercises" led to a general reform in the organization and management of the department of physical education in very many colleges and fitting schools for both sexes, and also in those belonging to the Young Men's Christian Associations. The organization of Athletic Clubs having elaborate and costly buildings and extensive athletic fields, soon became the fashion. In the thirteen years that have elapsed since the completion of the Hemenway Gymnasium, at least \$1,000,000 have been expended in building and furnishing school and college gymnasia. In a recently published paper by Dr. Sargent the following statement is made: "The amount of money expended in the United States on gymnasia, Athletic club buildings and grounds, apparatus, etc., is difficult to estimate accurately, as many athletic organizations have rooms in buildings used for other purposes; but it may be roughly stated that between 1860 and 1870, it was \$200,000; between 1870 and 1880, \$500,000, and from 1880 up to the present time (April 1891) considerably over \$5,000,000." Yale, Cornell, Bowdoin, Haverford, Lafayette, Lehigh, Washington and Lee, Rutgers, Leland Stanford, the Johns Hopkins,

Vanderbilt, the University of Pennsylvania, Gettysburg College, and the Elmira Reformatory, among institutions for men, and Vassar, Bryn Mawr, the Bryn Mawr School and the Woman's College of Baltimore, among institutions for women, have followed the example originally set by Amherst College, in 1860, and reset by Harvard in 1879, by choosing physicians as directors of their gymnasias.

It seems unlikely that the colleges will ever revert to their primitive and ill-advised custom of installing retired pugilists or broken-down athletes as directors of physical training. This is an important and praiseworthy achievement. It is also clear that, by reason of the increased attention given to athletics and gymnastics, there has been a marked improvement in student hygiene and morale within the past twenty years. Nevertheless, it cannot be gainsaid that the majority of our school and college gymnasias are but rudely organized and inefficiently managed, so far as the true ends of genuine physical training are concerned. This condition of things is largely due to the fact that faculties and boards of trust, in their zeal for building and the acquisition of plant, have overlooked or neglected the plain teachings of science with regard to the nature and relations of bodily training, and also the lessons of experienced common sense, both at home and abroad, as to the ways and means best adapted to secure the educative ends of such training. In short there has been a lavish expenditure of money for mere appliances, which would be ludicrous, if it were not symptomatic of feebleness of purpose and poverty of ideas. Our colleges, therefore, with but few exceptions, have not been in a position to speak with authority on the question of what constitutes a well ordered and practicable system of physical training for elementary and secondary schools. Consequently, though the school boards of several American cities, which have achieved laudable success in providing for the bodily education of the pupils in their pub-

lie schools, may have been partially impelled to action owing to the stir caused by the revival of college athletics and gymnastics, — their course of action has been chiefly shaped and determined by non-academic forces and agencies. In other words, the successful inauguration of school gymnastics by the cities of Chicago, Kansas City, Cleveland, Denver, Indianapolis and Boston has not been due to the example or aid of our higher institutions of learning; but rather to the insistence and zeal of the advocates of the German and Swedish systems of gymnastics who were prepared to speak with knowledge and to act with intelligence.

When we consider how large and influential an element the Germans constitute in the cities of the West, and recall the fact that the North American Turnerbund for many years has been the largest, most widespread and most efficient gymnastic association in the Union, it is not at all surprising that all the cities named above, with the exception of Boston, should have adopted German forms of exercise and German methods of instruction, as soon as it was decided to make physical training a part of the Public School curriculum. The Turnerbund is worthy of more than mere passing mention. It has developed from Turnvereine founded by political refugees who found asylum in this country after the revolutionary year 1848. The last report of the Turnerbund, that is accessible at this writing, shows that, on April 1, 1889, it had a membership of 31,869. Its property free from debt was valued at \$2,390,000, including 160 gymnasias and libraries aggregating 53,000 volumes. In the gymnastic schools maintained by the Bund, the number of pupils including 6,055 girls was nearly 22,000, — showing an increase of nearly 6,000 pupils in five years. The Bund's corps of salaried teachers of gymnastics numbered 140, most of whom had been specially trained for their work in the *Bundes-Seminar*, or Normal School, which is the oldest institution of the kind in the country. The gymnastic schools, whose

pupils are all too young to be members of the Turnvereine, have grown up within the last fifteen years : and were established primarily to afford instruction in gymnastics and the German language to the children of members of the Turnvereine, because such instruction was inadequately given or utterly neglected in the public schools. In many of the larger cities the Turnvereine have dramatic, musical, and art sections, and some of them maintain classes in drawing and modeling, and in manual training, sewing, etc. The theoretical principles of the Turnerbund are too heterogeneous and numerous to be considered in this connection : suffice it to say they are extremely and fantastically radical. Its practical aims, that are relevant here, are well set forth in the following extract from its statutes :

21. It is one of the chief aims of the gymnastic societies, and of the gymnastic union, to labor for the introduction of systematic gymnastic training into the existing schools, since such training is indispensable to the thorough education of the young.

22. It is therefore obligatory upon the gymnastic societies to see that their gymnastic exercises are conducted according to rational principles, and to take special care to employ only such persons as teachers of gymnastics, supervisors of exercises, and leaders of practice sections as are thoroughly qualified to understand and teach gymnastics in harmony with those principles.

It is furthermore the duty of the societies to labor in their own sphere for the establishment and perfection of good German-English schools, in which music, singing, drawing, and gymnastics receive full attention, and to work in favor of compulsory school attendance ; and lastly to take pains to have the German language taught in the public schools.

That a really practical and efficient system of class-instruction in free, light and heavy gymnastics should be in relatively successful operation in nearly all of the large cities of the West and North, including our own, during much of the period 1860-1885, without exciting the attention or rousing the emulation of such advocates of physical education as President Felton of Harvard, who was likewise

President of Dio Lewis's Normal Institute for Physical Education, and President Stearns of Amherst, to whom the introduction of obligatory gymnastics in that college in 1860 was chiefly due, and Superintendent Philbrick of Boston, or of such "system-makers," as Miss Allen, Miss Beecher, Dio Lewis, and Lewis B. Monroe, is truly an extraordinary circumstance. The truth would seem to be that the Turners were chauvinistic and distant, while the educational world, despite occasional gusts of theoretical enthusiasm, was on the whole apathetic and incurious with regard to the practical side of physical education.

Since 1884, at about which time the Turnerbund made a course in English an obligatory part of its Seminar curriculum, the efforts of that association towards securing the spread of public-school gymnastics have been much more successful than at any previous time. In the schools of Chicago, Cleveland, Kansas City, and Indianapolis the Directors of Physical Training are all graduates of the normal school of the Turnerbund. In October, 1885, physical training was made obligatory for teachers and pupils throughout all grades of the public schools in Kansas City. The following extract from a paper presented in April 1891, by Mr. Carl Betz, Director and Supervisor of Physical Training, of the Kansas City schools, at the sixth annual meeting of the American Association for the Advancement of Physical Education sets forth the characteristic features of the Kansas City system of physical training.

Our system of exercises in the main is the German system, although certain features of other systems, notably of the Swedish, are encouraged, and allowed to develop in the schools.

American plays and games of educational merit are given preference over those of other nations.

The Kansas City system of physical training, at the present stage of its development in the schools, comprises the following exercises, — all of which are known as disciplinary exercises.

- I. *Free Gymnastics*. — (a) By word of command; (b) With music;

(c) With singing (the singing by another class); (d) With breathing exercise.

II. *Light Gymnastics*.—(a) Long wands; (b) Short wands; (c) Dumb-bells; (d) Rings; (e) Indian clubs, without and with music.

III. *Tactics*.—(a) Plain marching without accompaniment; (b) Plain marching with castanets; (c) Plain marching with singing; (d) Plain marching with music; (e) Plain marching to the beat of the drum; (f) Fancy marches with music; (g) Fancy marches with singing; (h) Fancy steps with music; (i) Fancy steps with singing; (j) Fancy steps with castanets; (k) Marching with free gymnastics.

IV. *Popular Gymnastics, Out-of-door Sports and all Competitive Exercises*.

Exercises for Boys.—1. Fast walking; 2. Running; 3. Standing long jump; 4. Running long jump; 5. Hop, skip and jump; 6. Standing high jump; 7. Running high jump; 8. Pushing the pole; 9. Pushing wands; 10. Pulling wands; 11. Tug of war; 12. Pitching the stone; 13. Throwing quoits; 14. Ring-toss; 15. Bean-bag; 16. Ball games; 17. Lifting and carrying; 18. Wrestling the wand; 19. Wrestling.

Exercises for Girls.—1. Fast walking; 2. Running; 3. Long rope jumping; 4. Short rope jumping; 5. Double rope jumping; 6. Circular rope jumping; 7. Throwing grace hoops; 8. Ring-toss; 9. Bean-bag; 10. Ball games; 11. Carrying sand cushion on head.

V. *Outings*. Excursions into the woods, etc., etc.

VI. *Fancy Gymnastics*. Public exhibitions at the close of the school year.

In addition to these exercises, it is my intention to introduce into the schools, as soon as practicable, gymnastic exercises on stationary apparatus. The large and spacious, airy and well-lighted attics of all the new school buildings will be utilized for this purpose.

When this has been accomplished our schools will have a complete system of physical training, meeting, reasonably, all the requirements of modern physical education.

For the most part, all our gymnastic exercises are taken in large, airy halls, or on the playgrounds. The class-rooms are used only when there is no other alternative, and then they are thoroughly ventilated during the exercise. Each and every class in the Kansas City school district has a *daily* physical exercise of not less than ten minutes' duration. In the lower grades *free gymnastics*, in the higher grades *light gymnastics*, constitute the basis of the work. Marching drills are given daily in all of the grades. Whenever the schools are called or dismissed, the pupils march into and out of the buildings in a body, in military order, keeping time and step to the beat of a drum. As often

as the weather permits, principals give their schools, in a body, a short calisthenic drill on the playground before passing into the building. Ten minutes of the afternoon recess are devoted to out-of-door sports. Boys and girls exercise in separate divisions, each grade forming a group by itself. The principal directs and supervises the exercises, his teachers assisting him.

The director of physical training visits the schools as often as a division of his time among all the schools will allow. At the present time, this is once in four weeks. As yet we have no professional assistant teachers in the department. By order of the Board of Education, the principals of the schools act as assistants, *i.e.*, they are responsible to the director for the work in their respective schools.

In order to give the patrons of the schools an opportunity of seeing the gymnastic work done in the schools, an exhibition is arranged at the close of the school year in one of the opera houses. These exhibitions are very popular in Kansas City, and have been a revelation to many of what can be accomplished in school gymnastics.

The results of physical training in the Kansas City schools are clearly perceptible. Compared with former years: There is less boisterous conduct on the playground, pupils move about in the halls and classrooms with less noise and greater ease; during study and in the recitations the pupils are better able to fix their attention, etc. Especially prominent is the improvement in the carriage of our boys and girls.

Teachers, too, have gained by giving the gymnastic instruction. Being compelled through circumstances to take hold of the work and held responsible for their teaching, they have become excellent disciplinarians. It seems to me as if physical culture had changed the very atmosphere in our schools.

Director Betz writes me as follows concerning his method of instructing the teachers: "When I first began the work in the schools, I gave instruction to all the teachers and principals in a body. In the beginning all had the same work, — the rudiments of gymnastics. The teachers met every Saturday at the Central High School for three successive months. It was made obligatory upon all to attend these classes. After that I had the teachers meet for drill once a month, in a body; still later once a term, in sections, — each grade by itself. *It was not until the third year that I secured satisfactory teaching from the teachers.*"

The following facts concerning gymnastics in the Chicago Schools have been kindly furnished me by Mr. Henry Suder, the Superintendent of Physical Culture, in that city :

In November 1885 physical culture was introduced into four public Grammar Schools. After a successful trial, the Board of Education introduced it into all the Grammar Schools, and for this purpose a Supervisor and eight teachers were appointed in June 1886. The principals and teachers of the Primary Schools having asked for the introduction of physical exercises, they were introduced into all Primary classes in January 1889, by the unanimous vote of the School Board; and four months later they were introduced into all the High Schools. The staff of the department of physical culture numbers at present *twenty-four*: viz., a superintendent, two teachers for the High Schools, nine teachers for the Grammar and twelve for the Primary Schools, all of whom are men, and all but two from the Turnlehrer Seminar. For the year ending June 30, 1890, \$13,620 were appropriated for the teachers' salaries. In 1891 the appropriation was \$25,000. There is no special normal class for the training of teachers, and no such classes have ever been held. Class teachers, especially in the Primary Department, conduct the exercises on the days when the special teacher does not visit the school. The training of the class teachers begins after the special teacher has taught the class for some months. Pupils in the Grammar grades have a ten minutes' lesson, in gymnastics twice a week; and each Primary School is visited by a special teacher twice a month. The exercises in the latter schools consist of Free Movements; the Grammar classes practise Wand exercises in addition; while Indian clubs and dumb-bells are used in the High Schools. The exercises take place in the aisles of the school-room; and in the halls of such buildings as have halls. A gymnasium, 90 by 40 feet, has been provided in one of the newly erected High Schools, which will in due time be furnished with modern apparatus for the practice of heavy gymnastics. The average attendance in the Chicago schools in 1891, was 129,000, out of a total enrolment of 141,435 pupils.

In Omaha, Neb., St. Joseph, Mo., Canton, O., Denver, Col., and Louisville, Ky., the Chicago plan of having special teachers has been adopted, while the Kansas City plan of having a single director, without special assistants, has been followed in Milwaukee, Wis., Cleveland, O., McKeesport, Pa., Davenport and Keokuk, Ia., Rock Island and Cairo,

Ill., and a considerable number of smaller towns in Kansas, Iowa, Missouri, and Indiana. It should be said, however, that, with the exception of Cleveland, and Denver, the physical training given in the towns named in the above lists, is not nearly so comprehensive or systematic as in Chicago and Kansas City. Within the last year the Free Movements taught in the schools of Cleveland have been modified by a slight admixture of Swedish movements.

Unlike their Teutonic kindred, the Scandinavians of this country, as a class, have made no general or effective propaganda for their national gymnastics. The rise of Swedish school gymnastics in America within the past five years has been due to American initiative and endeavor. The appointment, in 1874, of a Swedish teacher, for three months' service in the department of physical culture in the Girls' High School, of this city, seems to have been a merely fortuitous circumstance. In 1886-87, instruction in Swedish "Free-standing-movements" was given with marked success by Mr. Nissen, in the Johns Hopkins University Gymnasium, of which I was then Director. The gymnasium of the Woman's College of Baltimore, which was opened in 1888-89, and is in some respects without a rival in the country, was fitted with Swedish apparatus at the outset, and has always been managed in strict accordance with Swedish principles, the class-instruction being intrusted to graduates of the Royal Central Gymnastic Institute only. The gymnasium of the Bryn Mawr School for Girls, also in Baltimore, which was opened in 1890, likewise has a Swedish teacher for Swedish work.

But Boston has earned the right to be considered the most influential centre, in America, of the movement for promoting swedish educational gymnastics. This result, which has been brought about within the last three years, is primarily due to the wisdom, generosity and public spirit of Mrs. Mary Hemenway, and secondarily to the discussions, reports, and votes of your Honorable Board precedent to its

adoption of the Ling gymnastics for the public schools, on June 24, 1890. The establishment by Mrs. Hemenway of the Boston Normal School of Gymnastics which already has no equals and few rivals in the country, as regards the genuine and thorough-going character of its training, is an event of capital importance in the history of physical training in America, and may well be ranked beside the gift to Harvard University of the Hemenway Gymnasium by Mr. Augustus Hemenway, her son.

The Boston Normal School of Gymnastics had its beginning in October 1888, when at Mrs. Hemenway's invitation a woman's class, composed of twenty-five public-school teachers, was formed for the purpose of testing, under the instruction of a trained Swede, the adaptability of the Ling gymnastics to use in the Boston schools. The experiment proved so satisfactory that, on April 25, 1889, Mrs. Hemenway offered to provide similar instruction, for one year without expense to the city, for one hundred teachers of the public schools, who should be permitted to use the Ling gymnastics in their several schools. June 25, the School Board voted to accept this offer, and in the ensuing September the class was formed. On September 1889, the Board accepted "with grateful appreciation, the generous offer of Mrs. Mary Hemenway to provide a teacher of the Ling system of gymnastics, for service in the Normal School, free of expense to the city." Mrs. Hemenway's further offer to provide free instruction "for those masters and sub-masters who may desire to make a thorough study of the Ling system for the benefit of the Boston public schools," was accepted by the Board on October 22. Mrs. Hemenway continued to maintain the "masters' class," and to provide the Normal School with a special teacher of Ling gymnastics throughout the school year 1890-91. The "masters' class" numbered 50 in 1889-90, and 57 in 1890-91. In 1889-90 there were 190 women engaged in teaching in the public

schools who received instruction in the Boston Normal School of Gymnastics. In 1890-91 the number was 140. Its first class of graduates, numbering 33, was graduated June 6, 1891. The demand for the services of graduates and pupils of this school, as special teachers of Ling gymnastics, greatly exceeds the supply.

October 8, 1889, the Committee on Hygiene, which had been given full powers in the department of physical exercises, (on March 12), presented a well-considered "Report of the Board of Supervisors on Physical Training in the Public Schools." (School Doc. No. 10, 1889.) The concluding recommendations of the Supervisors were as follows :

1. That the Ling system of gymnastics be the authorized system of physical training in the public schools, and that it be introduced into them as soon as teachers are prepared to conduct the exercises.
2. That a competent teacher of this system be employed to train the pupils in the Normal School and the teachers in the public schools.
3. That, for the coming year, provision be made for training at least the pupils in the Normal School, and the teachers of the first and second classes of the Primary Schools, and the fifth and sixth classes of the Grammar Schools.

These recommendations were approved by the majority of the Committee on Hygiene, and a minority report was made by Miss Hastings. Both reports were tabled. December 10, "the whole subject of physical training in the public schools was referred to the next School Board."

Meanwhile on November 29 and 30, 1889, Boston was the scene of the largest and most notable Conference on Physical Training ever held in the United States. Dr. W. T. Harris, the United States Commissioner of Education, presided over its deliberations. The call for it was signed by John W. Dickinson, Secretary of the Massachusetts Board of Education ; E. P. Seaver, Superintendent of the Boston public schools ; Francis A. Walker, President of the Massachusetts Institute of Technology ; and by the,

Presidents of Boston University, Colby University, Maine, and Wellesley College, as well as by many members of the Boston school committee and a large number of physicians and others prominent in educational circles. The audience at each of the four sessions of the conference numbered from fifteen hundred to two thousand persons. The major part of the audience consisted, doubtless, of Boston and Massachusetts normal and public school teachers; but New York, Baltimore, Brooklyn, and Washington, and other cities also, were represented. So, too, were Harvard, Yale, and Johns Hopkins Universities, and Amherst, Haverford, and Bowdoin Colleges for men, and Vassar, Smith, Wellesley, Bryn Mawr, and the Woman's College of Baltimore for women.

The programme which embraced papers, discussions, and illustrative class exercises in gymnastics, was a varied and interesting one, and served not only to set forth the general nature and effects of muscular exercise, but also the salient principles and characteristic methods of the German and Swedish and so called "American" systems of school gymnastics. Similar discussions, and illustrative gymnastics on a large scale, signalized the Fifth Annual Meeting of the A.A.A.P.E., held in Boston in April 1890. The public and educational mind was much awakened and not a little enlightened, by reason of so much discussion and exposition.

January 16, 1890, a Standing Committee on Physical Training was appointed. Dr. W. A. Mowry its chairman, made an exhaustive report on June 24, embodying the results of a wide tour in the West and South to observe the peculiarities and workings of various systems of physical training in public schools. The committee, without a dissenting vote, recommended the following:

(1.) *Ordered*, That the Ling or Swedish system of educational gymnastics be introduced into all the public schools of this city.

(2.) *Ordered*, That the appointment of one director of physical training, and four assistants, be authorized.

(3.) *Ordered*, That the salary of the director of physical training be \$2,640 a year, and that the salary of each assistant be \$1,080 a year.

The following order was substituted for the second and third orders appended to the report :

Ordered, That a director of physical training and one or more assistants be employed, the total salaries for the same not to exceed the sum of five thousand dollars (\$5,000) per annum, and that the Committee on Physical Training be authorized to nominate suitable persons for these positions, to commence at the beginning of the next school term.

In accordance with the above orders, the present Director of Physical Training was elected on November 25, 1890, at a salary of \$3,000 per annum; and the present Assistant Instructor was elected March 10, 1891, at a salary of \$1,680.

The example of Boston with regard to the introduction of the Ling gymnastics has been followed more or less completely, either by way of experimental trial or of formal adoption by Somerville, Waltham, Woburn, Lynn, Worcester, New Bedford, Fitchburg, Leominster, Andover, North Easton, Cambridge, Lawrence, Gloucester, Brookline, Rockland, and Clinton, in Massachusetts, by Dover, N. H., Pawtucket, R. I., and Hartford, Conn. The School Board of New York City last year authorized the trial, in a small group of schools, of school gymnastics. The system, which was provisionally adopted, is ultra-American — *i.e.*, it is so extremely eclectic that it may fairly be termed nondescript.

At the present day gymnastics in Germany include the popular gymnastics of the *Turnvereine*, school gymnastics, and military gymnastics, the latter being a modified form of school gymnastics. School gymnastics include free movements, light gymnastics, or exercises with light apparatus such as wands, dumb-bells, and clubs, and *Gerätübungen*, or

exercises on the more difficult gymnastic machines. Spiess introduced "class" and "order" gymnastics nearly fifty years ago, thereby making it possible for the ordinary teacher of a school class to teach gymnastics to all his pupils, in much the same way that other branches of study are taught. In the army and in the schools, exercises of all sorts are executed by the class or division at the word of command. In the *Turnvereine*, free and class gymnastics are also conducted in the manner alluded to above; though in heavy gymnastics the employment of foreturners or squad leaders is retained. Both Germans and Swedes have outgrown the childish practice, so common in America and England, of teaching gymnastics by means of memorized and musical drills. Indeed, I doubt if German or Swedish teaching was ever hampered by such inept and ineffectual methods. Popular gymnastics have never occupied the foreground in Sweden, and have assumed extremely little prominence, even in the background, till within rather recent years. In Norway, popular gymnastics are only semi-Swedish.

In comparing German and Swedish school gymnastics, the distinction between an artisan's kit of tools and an instrument of scientific precision suggests itself. Swedish gymnastics owe their distinctive features of simplicity of form, compactness and balance of parts, finish and precision of method, to Ling and his successors at the Royal Central Gymnastic Institute in Stockholm, which has been maintained by the Crown as a normal school, for the education of civilian and military teachers of gymnastics since it was opened, at Ling's instance, in 1814. Ling's principal writings are poetical; but he had more of the patient, critical, scientific spirit than Jahn, the "Father of German Turning," and did his best to discover the physiological and pedagogical laws which should underlie every rational scheme for the bodily training of children and youth. His natural impulses, and the exigencies of his position as an official teacher of teachers

and of military cadets, combined in leading Ling to adopt simple, direct and orderly measures. He made use of both free and class exercises before Spiess introduced them into German gymnastics. Apparatus gymnastics, though regularly employed by the Swedes, are given less prominence than is accorded them by the Germans. Certain gymnastic machines which are favorites with the Swedes are not used in Germany, and *vice versa*. Gymnastic games and fencing are employed both by Swedish and German teachers of school gymnastics. Much less care and attention have been given in Germany than in Sweden to physiological considerations, in the selection and arrangement of gymnastic movements; therefore the Swedes reject many forms of exercise as useless or injurious which pass muster in Germany. For example, the Swedes discard exercises that tend to constrict the chest, those that require the breath to be held, and those producing continued pressure on the larger vascular or nerve trunks. One of their most stringent rules is, that all movements should help and not hinder full, free and regular breathing. Swedish gymnastics surpass all other forms of pedagogical gymnastics, in the care taken in co-ordinating the exercises belonging to a single "day's-order," not only with regard to each other, but also with regard to the "day's-orders" which have been practised, and the "day's-orders" that shall follow. By means of the "day's-order" or "table" and the principle of "gymnastic progression," which they alone have fully worked out and adopted, the Swedes are enabled to order and vary their school gymnastics, from day to day, from month to month, and from year to year, in a graded series. By this means continuity is secured in the instruction; and the pupils, of whatever age or condition of health, are advanced from simple, easy, and absolutely safe exercises, to those that are complicated, difficult, or comparatively dangerous. Class-leaders and memorized drills have no place in instruction of this kind. All exercises, whether by

a full class or by a squad, are executed at the word of command. Continuous, progressive, and comprehensive gymnastic training cannot be secured by mere imitation of a leader, or by executing memorized exercises over and over again. Change and variety are necessary, and must be had. They are best secured in school gymnastics, by recognizing the laws of physiology and by following the principles of sound teaching.

Compared with teachers of gymnastics in any other country, those of Sweden are a small and highly trained corps. From its inception, the majority of the pupils of the Central Institute have been young officers in the army and navy, so that teachers of gymnastics in Sweden hold a better social position than elsewhere. Under special circumstances one may, by passing the required examinations, be licensed to teach without taking the course at the Central Institute, a course, be it said, more extended, comprehensive and severe than is the case in any other European normal or military gymnastic school. The influence and traditions of the Central Institute are paramount in all branches of Swedish gymnastics, and have made them what they are.

Hitherto, school gymnastics in Switzerland, Austria, Belgium, Denmark, Russia, Italy, England, and even in France, have followed or resembled German school gymnastics in the main; but in France, Denmark, England and Russia a tendency to adopt or approximate towards Swedish methods has declared itself, recently. In my opinion, the Swedish system is better adapted to the needs of school children, between the ages of seven and fifteen, than any other. For boys above fifteen and collegians—at any rate in England and America—I am inclined to think an admixture of German forms of exercise will be found advantageous; but I would have them grounded in Swedish gymnastics to begin with.

Our knowledge of the nature and needs of the human body and mind, in health and disease, has been enormously

increased and enlightened within the last sixty and, especially, the past thirty years; therefore the teachings of science regarding the nature and scope of physical training, of all human training, in fact, have gained concomitantly in weight, energy, and point. The following summary and incomplete statement of their teachings must suffice here. Speaking broadly, the muscular and nervous tissues, well termed the *master tissues*, constitute the executive or working mechanism of the body; and the chief function of all the other tissues of the body is to serve either as their purveyors or scavengers. The nervous tissue is the *masterful tissue* by reason of its animating and controlling influence upon all the other organs of the body. The main field of education is the nervous system, and at least three-quarters of school instruction being directed, wittingly or unwittingly, to the development of orderly, purposive neuro-muscular actions; we cannot escape the conclusion that systematic and well-directed exercise of the muscles is requisite for the maintenance of the health of the brain and for the development of its full powers. The structural integrity and functional power of the purveyor and scavenger tissues are indirectly promoted by muscular activity; while the most important direct effects of muscular exercise are, (1) the attainment or maintenance of normal size and strength by the master tissues, and (2) the acquirement of correct and economical habits of neuro-muscular action. The ends of physical training, then, are hygienic on the one hand and educational on the other. No comprehensive system of physical training can be considered safe or rational in which these ends are not clearly recognized and intelligently provided for — through the adaptation of its exercises to the varied and varying wants and requirements of the individuals to be trained, in respect to their sex, age, strength, mental capacity, and calling in life. The results which should be secured by such a system are briefly these: Erect and grace-

ful carriage of the head and trunk; a broad, deep and capacious chest in which the heart and lungs, developed to their normal size and strength, shall have free, full and regular play; square shoulders; a straight back; fully-developed and well-rounded limbs and the power to execute with ease, precision, and economy of force, such movements as are involved in the simpler exercises of strength, speed, and skill, and in ordinary gymnastic and athletic feats.

In the preceding pages I have endeavored to give a connected account of the principal events which have signalized the history of physical education in the United States and to suggest some of its relations to educational movement, that have occurred along other lines. The limits of a report forbid my undertaking to compare the origin and course of physical training in this country with similar phenomena of our own time and of times past in Europe. We are treading in much the same paths that have been opened elsewhere, and such a comparison might serve as a useful means of guidance and in showing the full extent of our indebtedness to foreign impulse and example. But the lessons that may be derived from our survey of the attempts and achievements in our own country and city are sufficiently numerous and distinct to throw much light upon our present needs and upon the most hopeful course of procedure for the future. The wisdom of our plans, and the success of our endeavors to make physical training a thorough-going, genuine, and enduring part of our public school course of instruction, will depend, very largely as it seems to me, upon the extent to which we appreciate those lessons and are guided by them.

The movements in the interest of physical education in which Boston has shown greatest activity are those falling within the periods 1825-28, 1860-66, 1880 to the present time. For convenience of nomenclature these primary periods may be designated as the Round Hill or Beck period, the Lewis,

or light gymnastics period, and the Sargent, or gymnasium building period. Certain parallel or derived movements have also occurred; namely, that for the promotion of manual labor in special schools or as collegiate departments, which had its beginnings in the early twenties, and culminated in 1835 or thereabouts, when Mr. Theodore D. Weld's report — as agent of the "Society for Promoting Manual Labor in Literary Institutions" — was published; the movement for popularizing physiology and hygiene, 1830 to 1850; the German Turners' movement which, though it began so long ago as 1849, has assumed considerable proportions in the educational field, chiefly since 1885; the athletic movement, which is still flowing with full force, dates practically from 1870; and the present movement for the promotion of Swedish school gymnastics, whose beginning may be assigned to the year 1888. It is a noteworthy and significant fact that interest in physical training has become much diversified and comparatively definite and enlightened since 1860. This furnishes a ground for the hope that the time is at hand when what was an intermittent, inconstant interest will become a continuous and sustained interest. A comparison of the literature of the present with that of preceding periods favors the same view.

The Round Hill period was one in which the then undeveloped and ill understood Jahn gymnastics were enthusiastically adopted and baldly imitated. Drs. Beck, Follen, and Lieber were men of trained intelligence, but neither the general nor the professional public was prepared to afford them generous and sustained support as exponents of physical education. They were diverted into more attractive and remunerative fields, and no attempt was made to make good their loss either by securing trained talent from abroad, or by attempting to train up competent teachers in their stead.

The Lewis period was characterized by more of spontaneous activity than its predecessors. By reason of the measures which prepared the way for it, and the fact that the teachers and managers of public schools were aroused to action, a distinct advance was made towards making physical training an integral factor in public school and collegiate instruction. It was a period when an almost unquestioning reliance on home talent was the rule. It was characterized by rather crude methods, and by vague and uncritical views; since those most prominent at the time either ignored or scorned the lessons of German, French, and Swedish experience in the same field. It should not be forgotten that the idea which is becoming dominant at the present time, namely, that teachers of school gymnastics require special and adequate normal training, first took practical shape in institutions established for that purpose in the Lewis period. To my mind the distinctive characteristic of the present interest in physical training is to be found in the growing conviction that trained intelligence must be employed to supplement and re-enforce enlightened enthusiasm, and in the desire of the benefactors and governors of educational foundations to provide ways and means for developing and seconding such intelligence. Practical illustrations of this conviction and desire are to be found in the decisive steps recently taken by the Turnerbund to enlarge the scope and to increase the efficiency of its Seminar; in the establishment and expansion of the Boston Normal School of Gymnastics; in the multiplication of summer schools and all the year schools of gymnastics; in the establishment of physical training departments in our own Normal School and in other normal schools that have been named; in the recent vote of the Board of Supervisors of Boston to make physical training one of the elective subjects of examination open to aspirants to their higher grade certificates; *and in the very recent announcement both by Cornell University and*

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